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As this edition of the *Australian Defence Force Journal* goes to print, ADF personnel are continuing to conduct operations around the globe. Each of those operations differs in any number of respects. Some can be described as traditionally military, while others are examples of a changed security environment that now requires a range of defence and non-defence forces to act in concert to achieve lasting solutions. At the same time, the Australian Defence Organisation is changing, adopting new command and control measures, introducing into service sophisticated and dynamic capabilities and analysing what the future means for the nation’s security. All of these issues, and more, are covered in the Journal’s lead article, an interview with the CDF, Air Chief Marshal Houston.

At the heart of the CDF’s message is the need to continue to develop as an organisation and, individually, as military professionals. As CDF notes, ‘it is imperative we develop a culture for learning’. With those words in mind this edition of the *Journal* endeavours to provoke and challenge readers.

Major General Jim Molan’s ‘Five Truisms’ will, I am certain, do both—as it intends. I look forward to the discussion that will follow, and if the *Journal* can be a forum for that process then it will fulfil a key aim I have set for it in 2007. One of Jim’s previous commands was at the Australian Defence College. He believes, like many, that our commitment to Professional Military Education should be ‘totally uncompromising’. His perspective, based on his experience as a senior member of the coalition forces in Iraq, demonstrates why that must be the case.

The article by Nick Jans and Judy Frazer-Jans, and the one by Dave Cox and Andrew O’Neil fit under the broad theme of professional development. Specifically, each of these articles takes up an issue area that flows from the interview with CDF. Where Jim has ‘Five Truisms’, Nick and Judy outline a ‘Five-Point Strategy’ to address the recruitment and retention issue of the ADF. They note in concluding that the ‘rank and file’ are looking for ‘genuine reform that addresses their career needs’. Dave and Andrew recognise this issue explicitly in their discussion of PME in Australia. But the analysis offered in ‘Has it All Gone Terribly Right?’ is a search for some enduring elements of PME, teased out from history, that we can use to strengthen and improve the current and future PME structure. That is, I think, a timely reminder that PME in Australia is not facing the sorts of difficulties that other militaries are currently experiencing. We have work to do but we have a good foundation.

In his recent article, Hew Strachan, ‘Making Strategy: Civil–Military Relations after Iraq’, *Survival*, 48(3), 2006, notes (p. 66) that: ‘The principal purpose of effective civil–military relations is national security; its output is strategy.’ Coming at this theme from different perspectives the articles by Christian Enemark, James Holmes and Toshi Yoshihara, and Michele Miller explore implicitly how difficult it is to develop strategy. Christian alerts us to an emerging area of security while James and Toshi examine the strategic posture of China. Michele’s article argues for an ends-ways-means approach to examine what she calls the ‘aspirational concepts’ of NCW and EBO against ‘classical maritime theories’. I think readers will find these articles challenging. They encourage on-going consideration of some core assumptions about strategy.
In my last Chairman’s Comments I said that the Australian Defence Force Journal Board would award a cash prize to the author of the best article for each edition. I’m pleased to announce that Wing Commander Richard Pizzuto will be the first recipient of that award. His piece on Air Force doctrine is a good example of the practitioner-focused type of writing that should be encouraged. The article recognises the need to retain single-Service doctrine and professional mastery, but sees that as functioning and being aware of the development towards ‘jointness’ in the ADF.

In closing I would like to make special mention of the review article, which helps commemorate the 90th anniversary of the Battle of the Somme, and the book reviews in this edition. They are strong and insightful pieces that round out this edition and it is the better for their inclusion. As many of you would appreciate publishing a journal like the *Australian Defence Force Journal* requires considerable effort. Lesley Vincent and Elaine Wigley are two members of my staff who contribute to the production of the *Journal* in many ways but seldom get recognition for their behind-the-scenes effort. As Chairman I extend the thanks of the Board to both of them.

D.L. Morrison  
Major General  
Commander Australian Defence College  
Chairman Australian Defence Force Journal

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**Letters to the Editor**

Dear Editor,

*Operation Orders (Book Review)*

Regarding the fine book review by John Donovan concerning *Operation Orders* by Pat Beale, DSO, MC, it appears the only thing missed in the accounts of voluntary contributions was the efforts made by the Commonwealth’s Rifle Clubs. Some members won Victoria Crosses and many did with five rounds of small arms ammunition what others did with 50 rounds. Unfortunately many condemners of Rifle Clubs today are not *au fait* with the potential of what that asset previously provided Australia.

Thanking you for an estimable Journal.

Fred Gibbs  
Peakhurst, NSW
Chief of the Defence Force: Interview

Air Chief Marshal A.G. Houston, AO, AFC

Just over twelve months have passed since CDF addressed the Senior Leadership Group (SLG) and outlined his vision for the organisation. In this interview with the Australian Defence Force Journal, we asked CDF to reflect on how Defence is progressing and whether the organisation is meeting the expectations and challenges of the contemporary strategic environment. He spoke with us drawing on the seven thematic areas he developed in his 2005 SLG address.

ADFJ: You have had a strategic level opportunity to see and assess, first hand, the ADF’s operational performance and preparedness over the last 12 months. How would you characterise our capacity in this area?

CDF: What has struck me most is the degree of competence and confidence that the ADF has on operations. This, I think, comes from the high standards we have set ourselves and from the level of commitment to achieving the task. Young commanders are highly skilled and demonstrate good leadership qualities. But I see that across all areas of the organisation. Where I believe Defence is particularly strong is in its willingness to examine how it does its business and improve. There is a systematic process in place that seeks to incorporate lessons learned. That process comes off a solid foundation of education and training. The Al Muthanna deployment is a good case in point. There is extensive training and mission rehearsal for six months before departure. And the organisation has, I believe, incorporated lessons from that operation into the next round of pre-deployment training. That’s an example of continuous improvement and it is something we do well.

ADFJ: Australia is recognised as a strong contributor to global and regional security. How would you respond to the view that this increased level of operations has the potential to stretch Defence too thinly in critical areas?

CDF: We all know that the organisation is travelling at a high level of operational tempo. In the middle of this year we had deployed about 5,000 personnel on operations. That sort of effort requires a strong level of commitment from all areas of this organisation. Let’s understand that this is a whole of Defence commitment. From those on operations, support in HQ, the policy areas and logistics I get an overwhelming sense that operational success has come as a result of teamwork. But we have been doing this since 1999 and my sense is that we can sustain it. The experience gained has created a flexible and adaptable force. It certainly is a challenge, but look at the record and see how we have performed. And that operational success, it should be noted, comes on the back of a significant Defence commitment to border protection. So yes we have been active on a number of fronts for many years but I do not think that has weakened our capacity to do the job the government has set for us.

ADFJ: What do you see are the key opportunities for Defence as it embarks on what is an ambitious program of capability acquisition?
**CDF:** We are certainly in the midst of an intense period of procurement. Getting that capability really is about giving our people the tools to continue to do the job they are already doing and then do it smarter. Importantly, I see this capability as improving the work environment in which Defence personnel have to operate. For example, I recently had the experience of spending time with a patrol boat crew. The Armidale class replacement for the Fremantle patrol boat is a significant improvement in power and capacity, but also crew amenity. Our people often work in difficult and stressful situations and if we can improve their working conditions then we should. The new capability provides that additional benefit.

The strategic goal of this new capability is to have a networked and deployable force that can perform in a range of environments. People, though, are central to maximising the effectiveness of this capability. We have to train and educate them to operate this capability but also to understand how it can be brought together and how it will give them a capacity to achieve the mission.

**ADF:** Against the background of current demographic and national employment trends, the ADF’s recruitment and retention issues are unlikely to be resolved easily. What is the current situation and could you identify some of the initiatives that Defence needs to take?

**CDF:** This is a difficult and complex issue. In retention we are getting better. There is more that needs to be done but we are on the right track. The organisation is holding more of its people than it did five or so years ago. And the context is important here. Australia has a very robust labour market and there is strong competition in the high-skills area. Defence is competing in that market for talent. That represents a double-edge sword for us. Highly trained and effective, our people are continually being sought by other government agencies and private enterprise. We are developing a range of measures to retain personnel and have invested considerable effort in this area recently. I think results will come.

Recruitment is difficult and in some areas we are not achieving the levels required. That said, we are getting smarter at targeting those areas of skills we need but there is a general shortage in the community. Attracting the right people to Defence means that we have to be more flexible. There is, I think, opportunity for us to become more involved with cadets and the secondary education sector. We will need to find innovative ways of encouraging young people to see Defence as their employer of first choice.

**ADF:** The ‘whole-of-government’ approach to national security requires a high level of engagement with other government agencies. Is this something Defence does well?

**CDF:** At its heart this is about inter-agency cooperation and a recognition that at all levels we need to work effectively in a seamless way to achieve the government’s direction. Teamwork is the key to success here. We do have a high level of preparedness to work with other agencies and we understand that the capabilities they bring to a situation or operation will help us achieve the overall strategic goals. The tsunami relief effort is a good case in point. The success of that operation hinged on a ‘whole-of-government’ approach with Defence playing a key part in that operation. Without a high level of teamwork and cooperation between and within the various government agencies involved we would not have been able to help our neighbours as effectively as we did.
ADF: Is the values-based approach gaining traction in Defence? In what practical ways do you think leadership and ethics can create a sustainable organisation?

CDF: The message is getting out. All around I see many examples of fine leadership in Defence and there is a real sense that people are now seeing leadership as a central part of their employment. And that process will strengthen this organisation. People need to be empowered to take on a leadership role in their everyday work activities because it is through leadership that we get the best results. We all face challenges in this environment but we can all make a solid contribution through exercising leadership and equally by behaving ethically. Leading by example is what each and every one of us needs to do and I think this attitude and behaviour is gaining traction. For an organisation as large and complex as Defence it will only work effectively if people adhere to a values-based approach.

ADF: You recently announced a review of Joint Education and Training. Do you see education and training as critical elements of capability?

CDF: Unless we have well trained and educated people we will not be effective. Defence has a long tradition of providing opportunities for its personnel to undertake study. We train our people to operate the systems they will use in the work environment. Education is at the heart of so much that we do as an organisation. So it is imperative we develop a culture for learning. Defence can provide the opportunity but each employee needs to take an active part in this process. We all realise that the world is becoming more complex and training will only get us so far. What we have to understand is that education is about developing problem-solving skills. Decision-making and problem-solving skills are the essential attributes that we need to develop across Defence. That means we have to move from a model of education that is about ‘what to think’ to one where we learn ‘how to think’. If we can do that we will end up with an organisation with significant capacity.
Iraq Truisms:
Five Truisms for the ADF out of Iraq

Major General J. Molan, AO

The Commander ADC has asked that I make some contribution to the content of the Australian Defence Force Journal which he hopes to use as a way of facilitating debate on the profession of arms, in this case, the profession of joint arms. To accommodate him, I have put together a number of what I have called Truisms, from my recent experience in Iraq. The first five I address in some detail, but I have included a list of others that could also be the subject of scrutiny and debate over time.

This is timely because the CDF has asked me to work for the VCDF over the next two years to assist in the joint lessons and concepts process that must occur after such substantial operational deployments as the ADF has sustained in Iraq and Afghanistan. This is but part of the responsible process of preparing for future conflicts.

I have written much in the year since I returned from Iraq. At the instruction of the CDF, I have spoken to many groups across the ADF and across Australia, to many civilian groups, given various interviews and even made videos on Command and Control for DSTO, but in none of these have I been able to really come to grips with the issues that I believe stem from the Iraq war for the ADF. The CDF has now given me a great opportunity to do this over the next two years.

I have called the observations I make in this article 'Five Truisms', but I could just as easily have called them 'Five Generalisations' or 'Five Prejudices'. Regardless of what they might be called, they give me a vehicle to express a viewpoint that I bring back to the ADF from a year’s fighting in Iraq.

Understand the nature of ‘modern warfare’

The first Truism is that we must understand the nature of ‘modern warfare’, or at least, one significant aspect of war as it is at the moment. It is the most important of the five. What we are facing in Iraq is an indication of what we are likely to be facing for some time to come in this Long War. It is not the only type of threat that the ADF must meet, but it should have a certain priority. An understanding of the nature of war ‘as it is at the moment’ is an absolutely essential start point in our journey to understand the relevance of the Iraq experience to the ADF.

Strange things have happened to war in Iraq, post-April 2003. Just about everything that we have been saying was going to happen, has now happened. Asymmetric, NCW, complex urban terrain, jihadist inspired, politics dominating, ‘three block’, information operations. It is all here. Much of it has not happened to us, but it could happen to us, it probably will happen to us, and we must be ready.
I try not to speak of ‘THE’ war in Iraq, because there is no ONE single war. You generalise about operations in Iraq (as I do) at your own risk. There are many ‘wars’ at different places at the same time, and the nature of the war in Iraq at any one place will change over time. When I refer in this article to ‘operations in Iraq’, I refer to those operations being conducted in the Sunni Triangle essentially by US, Iraqi and civilian contractor forces. This is where the return on investment for learning for the ADF will be greatest for the simple fact that we are pretty good at most other things.

We know that the war in Iraq in March and April 2003 was markedly different from the counter insurgency operations that have been conducted since then. The books *Thunder Run* (David Zucchino) and *The March Up* (Bing West and Major General Ray L. Smith) should still be required reading for anyone from any Service who wishes to understand modern armoured warfare, combined arms, joint operations, and Intelligence Surveillance and Reconnaissance (ISR). Ambassadors Bremer’s book on his year in Iraq (*My Year in Iraq*, L. Paul Bremer) is essential to understand the civil military interaction, and the interagency nature of any modern war. *No True Glory* (Bing West) is essential to understand the tactical nature of urban fighting against a Jihadist enemy. And *Not a Good Day to Die* (Sean Naylor) about Afghanistan is essential reading to understand how the unintended consequences of political and military decisions can lead to disaster, especially through ‘adhocery’ in units and headquarters.

I remember that for months in early 2004 in Baghdad, as Coalition and Iraqi troops were dying on the streets fighting Fadayeen, Jihadists, Wahabists, Salafists, Mujahideen, Criminals, Ba’athist Special Forces, Terrorists, a range of local Militias and anyone else that just hated us, we were engaged in a seemingly incongruous but serious and essential debate about what we were going to call the war that was all around us. Whatever it was, it was new to us as a Force. We went through definitions of Insurgency, called in ambassadors and academics and other commentators, and asked the Mentors from US Joint Force Command (JFCOM) to bring their longer term perspective to the argument. I reached back to Australia and informally asked my unofficial and continually disappointed mentor, Des Mueller, for intellectual assistance and was not disappointed with what he produced. The Brits brought in ‘counter insurgency’ experts, and I would have liked to have put the question to Ted Serong. We looked back as far as T.E. Lawrence, and as recently as Che and Ho. In the Force itself, we had a large amount of experience of recent and current South American conflicts, and we had a brilliant Red Team. Despite the fact that our soldiers were winning every fight, we could not proceed to a really useful Campaign Plan until we had determined what we were fighting, and a Campaign Plan was overwhelmingly important for everyone.

What we are doing in Iraq is popularly called Counter Insurgency (COIN). But there is no point in trying to fit what is happening in Iraq, particularly in the Sunni Triangle, into our doctrinal or experiential template. Iraq is what it is. In historical terms, the counter insurgency that we Australians associate with the Malayan Emergency, is not a bad model for Iraq. There were some good military/political organisational lessons but the US has, to my knowledge, been using similar structures since late 2003. The Emergency lasted for many years at various levels of foreign troop commitment, and it is an important lesson that the Malaysians successfully took the fight to their enemy for many more years after all foreigners had gone.
But the Sunni Triangle fight, I suggest, is more like our Vietnam experience in that widespread framework operations that involve sustained close combat are mixed with strategic level campaigns against the enemy leadership, while at any time you might have to use the same troops to fight a Baria or a Hue or train local forces or conduct civil military operations.

Fallujah, Sadr City and many of the other urban fights in Iraq are what could almost be called ‘conventional operations’ within a COIN environment. Therefore, in such a war it could be severe folly to just train your next force for something called COIN if you do not include in that training the most sophisticated joint urban operations, and you are not prepared to conduct sustained close combat. This is the modern version of COIN.

The ADF now has experience of a range of operations in Iraq. Muthanna operations are giving us invaluable experience. The 15 years of Northern Arabian Gulf experience for our Navy, the experience of our Air Force and our Special Operations point out the extraordinary challenge that any modern Military faces in covering the spectrum of operational needs. Add to that Aceh relief, RAMSI, domestic CT, littoral operations, and the list of things that the ADF has to be competent in just increases. We are a general purpose force and we must be able to cover a full spectrum of roles.

Given the operational load that the ADF carries, it is right to ask if the operations in the Sunni Triangle are something that the modern ADF needs to examine. Do we need to know about these types of sophisticated Joint land operations involving sustained close combat? My view is that this is not an optional extra. This is one of the most basic aspects of the Long War.

As I implied before, we in the ADF do an awful lot that is good. I saw first hand the problems that many of our fellow Coalition members got into in 2004 when things were finely balanced, when those who were fighting needed those with less robust Rules of Engagement (ROE) to assist, and where the results for all were less than satisfying. Some did not join the fight because they knew that they could not. Some did not join the fight because they were too slow to react. Some did join the fight effectively such as the El Salvadoran police at the Najaf hospital. Some others joined the fight and characterised it as defensive operations to their governments. Those countries that were less than successful did not realize that the nature of this war had changed. They had expected that because they had specified defensive ROE for their national force, that they controlled the threat environment. They had forgotten that the enemy has a vote, and can affect them even if it does not attack them directly. The result was that one of the strategic effects (to be seen to be pulling your weight in the international community) sought by the presence of each of these countries in Iraq, was compromised because they were unwilling or unable to fight. At that stage in 2003 and 2004, Australia did not have a formed land combat unit in Iraq and so was not faced with the choice. It now does.

The characteristics of the enemy, and the complexity of the battlespace define the standard that should drive ADF joint warfighting capability, not some green-eyed comparison with the mighty United States. From my Iraq experience, the term ‘modern warfare’ means, briefly, asymmetric, urban, violent, jihadist inspired warfare. The main feature of the version of modern warfare in which I participated in the Sunni Triangle was sustained close combat conducted amongst the people. In my year in Iraq, Coalition forces killed perhaps 9,000 enemy, the enemy killed almost 600 Coalition soldiers, 300 Iraqi soldiers and some assessments indicate that up
to 10,000 Iraqi civilians may have died, almost all indiscriminately killed by the insurgents. This is serious combat.

Despite this cost in military and civilian life, the Coalition in Iraq solidly achieved the political aim of the Campaign Plan. As Prime Minister Jafa’ari (and others) have said, the tree of Iraqi democracy was well watered by blood. But watered it was, and it has taken root in a fragile soil, and it still demands sustenance. Such bloody fighting requires courage at every level, but it also requires perspective and focus in its generalship, and a sophisticated use of what the ADF would consider ‘joint resources’ at the combat level, particularly joint fires and joint ISR. Because of the centrality of sustained close combat in modern warfare, the most important lessons that I draw for the ADF from my Iraq experience apply to the need for proficiency in sophisticated joint operations involving sustained close combat.

The kind of warfare that I have described above from the Sunni Triangle in Iraq is what the current enemies of our liberal values and our democratic society talk about when they gather. They get their ideas from the internet or from the beheading and recruitment video, and from those who have been to ‘Terrorist Central’ and returned. They see that it is violent, it is asymmetric, it is urban and it is all about will. For us to be prepared to counter it in a military sense, we need to put together a Joint land force capable of the most sophisticated joint operations involving an ability to conduct sustained close combat, using combined arms land operations with, amongst other things, joint fires and joint intelligence. On the bigger scale for the ADF, but not a lesson that I could draw directly from Iraq, you must add to this list that the ADF must also be very competent in littoral operations.

Twenty-first century warfare is highly technical but this statement of the blindingly obvious has not lessened the amount of close combat for the soldier. In fact, ironically, it has increased it. Advanced soldier skills are required in every part of the force, not just combat units. We have accepted risk for years in Combat Support and Combat Service Support by saying that protection of soldiers can be focused on Combat units, but no longer. Force protection of all our soldiers, and what we used to call Rear Area Security, is now of overwhelming importance. Force protection takes skill and manpower, soldier manpower or contractor manpower. In the US, Force Protection is a particular discipline, a staff speciality, a ‘Corps’ and we in the ADF need to see it as a skill as essential as any other traditional speciality.

For many years now we have had a stated requirement to be able to deploy and sustain a deployed ‘brigade’, and a ‘battalion’ on operations. But issues of such ‘performance standards’ are a basic requirement in defining any Joint Force because they reflect our understanding of the nature of modern war. The answer to such questions aligns us throughout the ADF. We are too small to be misaligned in the joint sense.

Because of the nature of modern war, to deploy a single, self sustaining ‘brigade’, able to conduct operations with the majority of its three manoeuvre units, with the wherewithal to conduct such modern operations in a post-Iraq asymmetric combat environment, the total number of troops deployed is likely to be far greater than the implied traditional measure, the size of 3 Brigade, about 3,500 troops. I say this because of the overwhelming need for protection and the manpower intensive nature of sustained close combat. That deployed force, with the ‘brigade’ at the centre, may have to be closer to six to ten thousand to achieve the same
joint land force effect from this ‘brigade’. The nature of war has changed as has our society’s expectations of protection of our soldiers, and we must understand the impacts on us.

**Be capable of conducting sophisticated joint warfighting**

The second Truism is that almost the only thing that I can identify that is a constant in this war is the need for forces capable of sophisticated joint warfighting. What is ‘sophisticated’, what is ‘joint’ and what is ‘warfighting’ are all issues that I hope the VCDF will permit me to explore in due course.

If our ADF deployed force is not capable of sophisticated joint warfighting operations, particularly in the use of joint fires and joint ISR, then it will not be able to join a future battlefield, will have to leave the battlefield or will have to revert to an excessively high level of force (‘kinetics’ in the jargon—bombs and bullets). Excessive kinetics creates large numbers of casualties and, in a counter insurgency situation, the more casualties, the less likely you are to impact favourably on the will of the people.

In the first few months that I was in Iraq, I was a member of a force that relied heavily on kinetics because, firstly, we were being continually challenged, but in addition, we did not yet fully understand the nature of the war we were fighting. But while we were being sheltered by our soldiers’ courage, learn we did, and a sophisticated, broad approach to countering an insurgency emerged while we were in combat, between April and August 2004. We quickly built on what had been achieved by US LTG Sanchez, and we capitalised on the extraordinary leadership combination of US General George Casey and US Ambassador John Negroponte. I make the point that in the period April 2004 to August 2004, the MNF-I did not initiate one major operation—we merely reacted. From the end of August 2004 onwards, we initiated almost every major fight in accordance with the Campaign Plan, and every action was aimed at meeting the first political milestone of the January 2005 elections.

If part of your national motivation for being in a Coalition is how a major ally perceives you, and that ally needs your help in desperate times and you cannot deliver, what is the real strategic effect on you as a country? What is your sacrifice really for? I saw this occur in the time period I mentioned above, and I suspect that the strategic effect for those countries will be long lasting. You do not get strategic credit for not being able to fight, or by fighting clumsily. All you do is reinforce unfortunate stereotypes despite diplomatic rhetoric. Anyone who doubts that just needs to read Ambassador Bremer’s book on his year in Iraq. I was there for the last three months of his time and I saw and heard what he is now writing in his book.

There were 30 countries in the MNF-I when I arrived in April 2004 and there is a lesson for all of us in each one’s experience. We should all examine the experience of our coalition partners in the Coalition in Iraq such as the Italians, the Poles, the Ukrainians, the El Salvadorians, the Brits and the Spanish, and the demands that were put on them by the changing nature of modern warfare in the intense fighting in August 03, April 04, August 04 and November 04, when the US needed their allies’ help. It would do all of us the world of good to regularly look at the Dutch experience in Srebrenica, the UK experience in Sierra Leone and the Malaysian experience in Mogadishu. Regardless of your mission or your ROE for that mission, to deploy
forces that are not effective Joint warfighters capable of sustained close combat is taking a big risk. Remember, the enemy has a vote. If you are the weak link, he will attack you. That is what asymmetry is all about.

**Iraq warfighting implies sustained close combat**

The ADF has not conducted sustained close combat since Vietnam. The US conducts sustained close combat every day of the week. They do it and so they learn, especially from their mistakes. They have officers and NCOs who are on their third tour of Iraq, or have moved between Iraq and Afghanistan. The US has paid for this experience with over 2,600 dead and over 15,000 wounded in Iraq alone. We should now expect that in almost any deployment in the Long War on terrorism, we need to be able to conduct sophisticated joint operations involving sustained close combat.

There is a very interesting view in our society of the modern soldier being a victim. I see this as very dangerous to the combat ethos that lies at the centre of our military. A number of times since I returned from Iraq, I have met people who desperately want to see me as a victim of ‘George Bush’s unjust war’.

I make no public comment on the invasion of Iraq because I do not have to—I did not invade Iraq. What I can say is that I deeply believe in that part of the Iraq war that I was involved in as a just war in a just cause, and I do not apologise for what I or the Coalition did in 2004 and 2005. I personally was in a position to do extraordinary things for the Iraqi people in accordance with what I was sent to Iraq to do.

What I do acknowledge is the fundamental evil in many of the hard core of the enemy that we fight in Iraq and Afghanistan. With some of these people, you cannot reason and negotiate. They will not compromise.

As a General, I can attack my country’s enemies on a larger scale than I ever could as an individual infantryman and using much broader tools than just kinetic effects, as I did in Iraq. I can focus diplomatic, political, information, economic and reconstruction power to supplement military effects to impact on extremist ideas. As part of the ADF, I exist professionally to apply legal force against the enemies of our country as defined by the elected government, and I am proud to do so. Such an ethos gives me resilience. In the combat ethos, there is no room to see oneself as a victim of war.

But this level of resilience should not be limited to soldiers, sailors and airmen only. Our country must be resilient if we are not to launch our military into combat and then lose our nerve as a country. Again, I saw this in Iraq from close quarters in the first battle of Fallujah in April 2004, the month I arrived in Iraq. The Marines were launched into Fallujah against their better judgement by their masters, and then after a few days of extraordinary fighting, they were forced to withdraw, leaving the job incomplete, and the sacrifice in blood difficult to justify. The tension that this creates throughout a deployed force has to be seen to be understood. We did it differently the second time around, in November 2004.
So there must be the tightest link between national interest and military action. If force has to be used, then soldiers must be prepared to die for vital national interests. That is the warrior’s contract. All of us who went to Iraq agreed to this contract.

**Force must be applied effectively and legally at every level**

What prevents a combat ethos being abused is our humanity and our observance of the Laws of Armed Conflict (LOAC). To observe the LOAC within the expectations of modern society and the demands of an asymmetric war amongst the people, we need to have situational awareness through Intelligence, Surveillance and Reconnaissance (ISR) to a far greater extent than we ever did before. The way that armies manoeuvre now in COIN is through the bulk of the force conducting framework operations, and an element attacking the leadership who are, in effect, using the people in the cities as hostages. To attack the enemy leadership in such a situation, effectively and legally, requires very sophisticated ISR. I started to think in Iraq that you could not conduct higher level counter insurgency manoeuvre legally in such a situation without full motion video.

Every action that we take in combat must be based on Proportionality, Humanity, Discrimination and Necessity, even more now that we are fighting amongst the people. We are legally required to make an estimate of the number of civilians that might be killed or injured by our actions, and that estimate must inform our judgement on whether to act or not. What I learned in Iraq was that this does not mean that the application of violence, when violence and force can be legally applied, needs to be less effective. Violence in war is not illegal. When force is to be applied, it must be applied legally and effectively, but it can still be applied very, very violently when that is necessary.

As a commander, it is my responsibility to create the conditions for my soldiers to be able to fight effectively within the requirements of the LOAC. Once the decision is made to use force, the use of that force must be made as simple as possible for the soldiers on the ground. This was the approach at Fallujah in November 2004, and the aim of most of the strategic level shaping.

In my personal experience, I saw the first engagement in Fallujah in April 2004. The MNF-I was rushed into the fight. It failed (not tactically and not militarily) at a significant cost in lives. I compare this to the second measured approach to Fallujah over several months that culminated in the November 2004 attack. On this occasion in November 2004, we learnt from our previous errors. We shaped the battlefield in all ways over three months. We applied force when we were ready to do so and in accordance with a plan that gave the combat soldiers the best chance to fight effectively. We had political support. We cared for the citizens of Fallujah despite what the media likes to say. Our attack was overwhelmingly successful at minimum casualties to all parties, including the Fallujans. Despite perceptions, the US Marines paid a price in lives by the care that they took as they operated in Fallujah.

Do not ever assume from what I have said that the plan in November 2004, despite being effective, was smooth or, in any way, pretty. It was the best that we could do at the time and like all military actions, 90 per cent of the effort goes into execution, keeping it all on track and keeping it together, and only ten per cent goes into the original idea or to the planning.
Then of course, the courage of the soldiers and the leadership of junior commanders make it all happen.

**The General is still the only individual in the military that can lose the war for you**

One of the great strengths of our society is that it does not take its leaders, particularly its politicians (perhaps its generals) too seriously. The downside of this commendable trait is that we tend to forget that our ‘generals’, our senior commanders, are the only individuals in uniform that, by themselves, can lose a war for us.

When I went to Iraq I was only 18 months out of being a division commander in the ADF. I commanded Australia’s 1st Division of 15,000 soldiers, and the Deployable Joint Force Headquarters, for two and a half years. Yet, when I compared myself in operational and tactical competence to the four US division commanders that were in Iraq at any one time, each of which was really a joint land force commander, I concluded that the ADF can learn much from our ally.

I saw US division commanders and some brigade commanders at very close quarters over an extended period of time, in very demanding situations. They were very good. Based on what I saw of the 1st Armoured Division, the 1st Infantry Division, the 1st Cavalry Division, the MEF and the 1st Marine Division, elements of the 25 Infantry Division, the V Corps, the III Corps and the XVIII Corps, the US is certainly producing some very good commanders. Granted, they are greatly experienced, but they are also the product of education and technical training that I believe you can say is now the best in the world.

Now when I say this I am always confronted with the experience of others who have seen the inadequacies of the US military. I do not see it as contradictory to say that the US is producing the best commanders in the world, but that like any deployed military, they have their failings. I saw the best and the worst of our great and powerful friend. I lived and worked for 20 hours a day for a year with these people. I do not say that other opinions are wrong, I just say that both can exist in the same force at the same time. But I certainly stand by my view that senior US commanders were highly competent. This is not simply due to experience, and I think we should investigate why. I welcome the CDF’s review of joint training and education in the ADF, I think that it is a most appropriate thing to be doing.

A real high point for me in senior officer training was participation in the US Battle Command Training Program, the ‘Warfighter’ series of exercises. Two years part time and six weeks full time, with the command elements of the brigade that I commanded at the time, the 1st Brigade. I learnt more in this activity about being a commander than I did in any Australian training and educational activity. A few years later I was posted from being a division commander/joint commander to being responsible for the joint training of our senior and junior officer leaders. I found that in certain areas, despite the dedicated staff, our mid level and senior level joint training lacked an edge that is required in high intensity combat. I initiated as much change as I could in 18 months and I am comforted to see my successors moving in the right directions with our Professional Military Education. The study into joint education and training is very important. We need our ‘senior sirs’ to be bureaucrats and diplomats, but we also need the required number to be technically proficient, especially in joint warfighting operations.
I kept asking myself: Why does the US take the preparation of their senior joint commanders so seriously? Nothing is more important than Professional Military Education because it creates our intellectual capital. The Australian Command and Staff College seems to be making great strides into a relevant joint future and there are some great ideas around about where it could go. The Centre for Defence and Strategic Studies is also bringing more military content into its course and this is comforting to see, and relevant to modern warfare.

We have a unique chance to learn now without paying the butcher’s bill in blood. Investment in Professional Military Education should be like war itself, totally uncompromising. The way that we should teach Australians to be joint commanders in modern war, to be capable of commanding sophisticated joint operations involving sustained close combat, is to give substance to the comfortable concept of the ‘Australian Way of Command’, and apply the most rigorous and uncompromising standards to our candidates for joint command.

The Australian way of joint operational command should be based on the deepest understanding of the nature of modern war, it should be the most professional activity that we as a military undertake, it should be intellectually rigorous and test candidates as individuals, it must create as high a level of joint technical competence as we see in the single Services, and it should be based on uncompromising standards, because that is what war is. Of course it should be resourced appropriately. Why is it that we take such a different philosophical approach to preparing and assessing those who will command our submarines, our aircraft and our counter terrorist forces, than we take in those who will command our wars? We have competent single-Service commanders, all we need to do now is to extend that attitude to Jointery.

So there are five of my Iraqi Truisms and I offer them to you for your consideration.

**Other random Truisms**

But I came away from Iraq with many other impressions that are certainly lessons and that could be Truisms. Here are some of them:

Any force needs to be aligned behind a central idea—it is part of the indivisibility of military command and it goes to the importance of a Campaign Plan. You set yourself up for gross failure, especially in the Joint arena, unless you align the organisation behind a sufficiently detailed operational concept that has context, metrics, scale and performance standards. This is not as difficult as everyone tries to make out that it is.

In this period of Jihadist challenge, a Joint Land Force capability (which includes littoral operations) should take a certain development priority, but Australia cannot ignore its Joint Air or Joint Maritime capability.

The human being remains the most important factor in command and control, and human relationships are more important at every level than technology. Good commanders in Iraq were enabled by the highest technology in the world to spend more time with their troops, talking and seeing and inspiring.

Extremist ideas must be confronted across all lines of operations, and military commanders must be very good at all of them.
Execution of coordinated, synchronised and orchestrated military, political, economic and information activity, as required to counter insurgency, is extraordinarily difficult. Very few of us understand coordination or synchronisation, even at the tactical level, and our prospective commanders must practice orchestration.

Irrational manpower caps that create adhocery in deployed organisations and units, and that destroy our cohesion far faster than any action of the enemy, are indeed evil.

Effective C2ISR requires technology, but it also needs highly skilled manpower in large numbers. The clever, creative and imaginative parts of Intelligence, for example, are still done by people, and lots of them.

Information Operations and Civil Military Operations are part of Manoeuvre, they must exist and they must be centralised in the command and staff process under the senior manoeuvrist.

To learn warfighting, study those who are fighting.

It is still people that make it all work. To solve a problem, choose a good person to own the problem and find the solution.

Investing in Special Forces at the expense of conventional forces is only a good idea as long as you have no intention of ever using the conventional forces.

Preparation for war should be as uncompromising as war itself.

**Conclusion**

We do a lot of things very well in the ADF. Man for man we are as good as anyone in the world. We are small enough to be very, very good. We are, in effect, a military that most others would call a ‘Special Force’. Our Services have made incredible leaps forward since we regained military logic after East Timor. We are commendably Joint at the strategic level. We should be far better than equivalent elements of militaries from the US or the UK, just because they are so big and we are so small. In almost every area of the ADF, we seem to be going in the right direction led by inspiring commanders. Where we need to concentrate our efforts now is in preparation for sophisticated joint warfighting operations involving sustained close combat, and in creating the intellectual capital amongst our Joint Force Commanders that will enable us to ‘win the fight after Iraq’.

*In April 2004, Major General Molan deployed for a year to Iraq as the Deputy Chief of Staff for Operations (Chief of Operations), Headquarters Multinational Force – Iraq during continuous and intense combat operations. This period covered the Iraqi elections in January 2005, and the pre-election shaping battles of Najaf, Tal’Afar, Samarra, Fallujah, Ramadan 04 and Mosul. For distinguished command and leadership in action in Iraq, Major General Molan was awarded the Distinguished Service Cross by the Australian Government and the Legion of Merit by the United States Government.*
Pandemic Influenza and National Security

Christian Enemark

Athens owed to the plague the beginnings of a state of unprecedented lawlessness… No fear of god or law of man had a restraining influence. As for the gods, it seemed to be the same thing whether one worshipped them or not, when one saw the good and the bad dying indiscriminately. As for offences against human law, no one expected to live long enough to be brought to trial and punished…

Thucydides, History of the Peloponnesian War

Introduction

The H5N1 avian influenza virus has a devastating effect on poultry and is highly lethal when it infects humans. At present, this virus therefore poses a grave threat to animal and human health. However, if H5N1 were to forsake its avian hosts by mutating into a form transmissible between humans, the virus could become a health threat so severe as to warrant being treated in security terms. The purpose of this article is to highlight and explain how pandemic influenza could possibly affect national security. It analyses this problem in four sections which address the following questions:

1. How would a pandemic occur and how much damage would result?
2. What is the essence of the security challenge posed by pandemic influenza?
3. What can be done to prepare for damage control?
4. Is Australia sufficiently prepared to respond to a pandemic?

At the outset, it is important to acknowledge that a pandemic of influenza is neither inevitable nor necessarily imminent. However, historical experience suggests strongly that the world is overdue for an event of this kind. As such, in this first ever identifiable ‘pre-pandemic’ phase of human history, it makes sense to be thinking seriously about how individuals and governments might respond.

Pandemic!

The threat of H5N1 avian influenza needs firstly to be placed in perspective. A situation in which humans are threatened by an animal disease, although unfamiliar to many people, is far from new. Around 10,000 years ago, when humans first shifted from a hunter–gatherer existence to farming with domesticated animals, settled communities came into close contact with the infectious micro-organisms present in their flocks and herds. This co-existence was the origin of such diseases as smallpox, measles, chickenpox, tuberculosis, leprosy, the common cold, malaria, bubonic plague and influenza.1 In a sense, therefore, the emergence of diseases like H5N1 represents not a new threat but rather a return to ‘business as usual’ between man and...
microbe. The key difference, however, is that in 2006 the stakes are higher because increased human interconnectedness could facilitate the rapid global spread of disease.

Current fears of an influenza pandemic have been excited by the fact that the H5N1 virus has repeatedly managed to jump species and successfully infect humans (see table below). Every instance of this is a potential opportunity for the avian virus to mutate into a form better adapted to transmission between humans.

Influenza pandemics are rare but recurring. Historically, they have always caused high rates of illness and death, with consequent social and economic disruption. The worst pandemic of the 20th century was the ‘Spanish flu’ of 1918–1919 which killed around 50 million people worldwide. Subsequent pandemics in 1957 (the ‘Asian flu’) and 1968 (the ‘Hong Kong flu’) were much less deadly, causing two million and one million deaths respectively. Public health experts are now warning that the world is long overdue for another influenza pandemic, and the adverse effects of this coming plague would be all the greater because of the increasingly globalised nature of human experience and interaction—whereas past pandemics spread globally via sea lanes, a pandemic today would spread via international air travel. The conservative estimate of the World Health Organisation (WHO), using epidemiological modelling based on the comparatively mild 1957 pandemic, is that a future influenza pandemic would cause between 2 million and 7.4 million deaths worldwide. However, expert estimates range as high as 150 million deaths.²

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<tr>
<td><strong>TOTAL</strong></td>
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Confirmed human cases of H5N1 avian influenza
(26 December 2003 to 6 June 2006)³
There are at least three factors affecting how deadly a pandemic would be: (1) the speed at which the influenza virus spreads; (2) the pathogenicity of the virus; and (3) how much medication is available for victims and potential victims. According to WHO influenza program director Klaus Stöhr, a pandemic influenza virus would cause moving waves of outbreaks in humans lasting 1–2 months in a given region and complete its global spread in 8–12 months or less. Eventually, the virus would settle down to cause much milder seasonal epidemics, until the next pandemic virus took over. With regard to pathogenicity, the improved transmissibility required to ignite a pandemic would likely be accompanied by a lower degree of virulence as the virus adapted to its host. That is, the virus in pandemic form would probably not generate rates of mortality as high as have been seen so far (on average, around 57 per cent)—in order to thrive in humans, the virus must not kill too many of its victims too quickly. However, that would also mean estimates of influenza deaths represent only a fraction of the number of people who would be hospitalised, and an even smaller proportion of those who would be infected and fall ill.

On the issue of the availability of medication, it is worth noting firstly that, in contrast to the situation during the 1918–1919 pandemic, modern antibiotics (for those who can get them) reduce the risk of influenza patients dying from secondary bacterial infections. More generally, however, the main reason past pandemics were so disruptive is because they took the world by surprise. The present situation is different. The world has been warned in advance, with the unfolding conditions for a pandemic under close observation for over two years. This advance warning has allowed an unprecedented opportunity for national and international preparation to mitigate the effects of a global influenza outbreak by, for example, researching a pandemic vaccine and securing supplies of antiviral drugs. In addition, the outbreak of severe acute respiratory syndrome (SARS) in 2003 was a pandemic ‘dress rehearsal’ which sensitised governments around the world to the health and security significance of a fast-moving, unfamiliar disease.

The H5N1 virus already meets two of the three criteria required to cause an influenza pandemic—the ability to replicate in humans, and the absence of viral antibodies in the human population. The third criterion is that the virus can spread rapidly among people as easily as regular human influenza. To date, disease in humans has been caused by close contact with infected birds. However, some disturbing evidence of human transmission emerged as early as September 2004 in a case surrounding an 11-year-old Thai girl who became ill three to four days after her last exposure to dying household chickens. The girl’s mother came from a distant city to care for her in a hospital, had no recognised exposure to poultry, and died from pneumonia after providing 16–18 hours of nursing care. A study published in the New England Journal of Medicine concluded that disease in the mother probably resulted from person-to-person transmission of H5N1 during unprotected exposure to the index patient. And in May 2006, a cluster of six deaths from H5N1 influenza infection within one Indonesian family prompted an urgent WHO investigation to determine whether the virus had mutated. Fortunately, laboratory analysis of virus samples showed that it had not.

The security dimension

The prospect of pandemic influenza touches the security nerve of people and politicians in ways that set this disease apart from the many others that may be regarded simply as health issues.
A pandemic virus would potentially cause illness and death on a large scale, but that alone is not what excites political attention. Diseases other than influenza exact a great human toll—most notably AIDS, tuberculosis and malaria—but they do so in a slow-acting and relatively familiar manner. By contrast, the effects of an influenza pandemic would be swift and unfamiliar. This in turn could generate levels of dread and disruption vastly disproportionate to the likelihood that any given individual would become infected and die. Individuals have a deep-seated, visceral fear of infection associated with the inherent invisibility of a microbial threat and the notion of horrific symptoms leading to an unpleasant death. In addition, societies have a collective fear of contagion informed by dark memories of past pestilences such as smallpox and bubonic plague. In the case of pandemic influenza, this dread of disease would be amplified by the speed with which damage would occur. Just as nations fear military conflict because so many national achievements could be quickly undone, so too an influenza pandemic would swiftly set back hard-won economic gains and potentially undermine trust in government. And like the all-consuming effort of prosecuting a war, defeating ‘the flu’ would become a first order issue for governments—one which would alter the premise for all other activity.

Under circumstances in which a fast-spreading and unfamiliar disease is inspiring dread and potentially stimulating panic among national populations, the social contract under which citizens rely on governments to protect them during times of crisis would be subjected to severe pressure. The SARS outbreak of 2003 provided a glimpse of this phenomenon when, in parts of China, there were riots caused by rumours of government plans to establish local SARS patient isolation wards. Such incidents demonstrate the panic caused when populations imagine a disease out of control, and where governments are seemingly unable to secure the safety of their citizens. On the eve of a possible influenza pandemic, the effects of which would eclipse the 2003 SARS outbreak in terms of both scale and duration, consolidating trust in governments is an essential measure for pre-empting panic.

An example of government squandering of public trust followed the death in February 1976 of a US soldier in New Jersey who had been infected with H1N1 influenza—a disease not seen in humans since 1919. On 24 March 1976 President Gerald Ford consulted some of the world’s top virologists and afterwards appeared on television recommending that Congress appropriate funds for a ‘swine flu’ vaccination program for all Americans. Within 10 months the United States produced 150 million doses of H1N1 vaccine and vaccinated 45 million people. However, the side-effects of the vaccine killed two dozen people and sickened hundreds of others before the vaccination program was cancelled. And because the feared epidemic of influenza never struck, this expensive, unnecessary and occasionally dangerous campaign caused widespread distrust in government health initiatives. The present situation is different in that the H5N1 virus, which first emerged in 1997, has repeatedly caused human deaths. Nevertheless, the 1976 ‘swine flu’ experience is a warning against overreaction on the part of governments.

For the most part, the foundation for trust in government during a time of crisis is accurate risk communication before the crisis hits, including reassurance that it might not hit soon or at all. Accordingly, the WHO Global Influenza Preparedness Plan recommends that governments devise and implement national communications strategies for keeping people informed about the threat of influenza and the measures being taken in response. Such strategies for the ‘ interpandemic period’ include, for example:
• establishing formal communications channels with WHO and other partners for the sharing of information on the genetic evolution and geographic progress of an influenza virus with pandemic potential;

• familiarising news media with national plans, decisions and activities related to pandemic preparedness;

• maintaining a website with relevant information;

• developing feedback mechanisms to identify the level of public knowledge about pandemic influenza and emerging public concerns; and

• addressing rumours proactively and promptly correcting misinformation.12

The last point is particularly important because incorrect information, misinformation or inconsistency in the information available to the public can result in overreactions to media coverage and subsequent internal pressure on governments to respond. Politicians are themselves susceptible to succumbing to the human dread factor associated with infectious disease outbreaks. And as demonstrated by the 1976 ‘swine flu’ affair, an excess of fear can lead to the overestimation of risks or the design of reactive policies whose costs may exceed their benefits.

The importance of trust in governments extends also to international relations. The influenza pandemic of 1918–1919 became known as the ‘Spanish flu’ because Spain, a neutral country during World War I, did not have the same restrictions on press reporting of disease outbreaks as did countries still at war in late 1918. For economic and political reasons, countries today can still be sensitive about the rest of the world knowing about their disease outbreak status, although such information is now much harder to conceal. One of the most important lessons from the experience of SARS in 2003 was the importance of government transparency in fostering cooperation against a common microbial threat. In particular, China’s bungled initial response to SARS demonstrated how the withholding of information only compounds the damage from a contagious disease, hinders the task of containing an outbreak, and heightens the risk posed to other countries.

As of mid-2006, the H5N1 avian influenza virus has not mutated into a form capable of human-to-human transmission, although the risk of this is serious enough to warrant high-level political attention. For the first time in history, governments have an opportunity to warn their citizens in advance of a pandemic, whether caused by H5N1 or another influenza virus subtype. Combined with preparations for damage control in the area of human health, this advance warning should be based upon the best and latest available scientific information being communicated candidly to the public. By thus fostering trust in government, this would do much to minimise the panic that historically accompanies a pandemic. Nevertheless, it is useful to prepare for widespread social anxiety, the imaginable effects of which could include a breakdown in civil order.

According to the WHO, once a pandemic is underway the overarching goal of national governments should be to minimise its impact. Recommended measures include the following:

• Monitor and assess the national impact of the pandemic (morbidity, mortality, workplace absenteeism, regions affected, risk groups affected, health worker availability, essential
worker availability, health care supplies, bed occupancy/availability, admission pressures, use of alternative health facilities, and mortuary capacity).

- Assess the need for emergency measures—for example, emergency burial procedures, use of legal powers to maintain essential services.

- Inform the public about interventions that may be modified or implemented during a pandemic—for example, prioritisation of health care services and supplies, travel restrictions, and shortages of basic commodities.

- Acknowledge public anxiety, grief and distress associated with the pandemic.13

Reading between the lines, the WHO appears to be contemplating the possibility of a breakdown in civil order as societies cease to cope with the enormity of a pandemic. Were this to occur, influenza would become the first order security concern for governments, overriding all other activities. A critical issue as regards social functioning is whether essential services could be maintained if large numbers of people were falling ill and dying, and more broadly if uninfected people simply refused to risk human-to-human contact. With absenteeism a likely concern, there would need to be ways to maintain services such as health care, power, water, food, transport and banking. And historical experience suggests the possibility of other alarming and demoralising shortages—for example, within one month of pandemic influenza appearing in Washington DC in September 1918, the disease had killed so many people that coffins and grave diggers were in short supply.14

**Preparation for damage control**

A campaign against pandemic influenza would depend primarily on pharmaceutical defences (antiviral drugs and vaccines) for individuals. A vaccine matched exactly to a pandemic influenza strain would take several months to develop and manufacture, and so the first concern of governments which can afford it has thus far been to acquire stocks of antiviral drugs capable of reducing the severity and duration of influenza illness. For example, a drug such as Tamiflu can, if taken by a person immediately after he or she is exposed to the virus, prevent that person from becoming infected and spreading disease to others. Unfortunately, the world’s supply of the drug is limited, largely because there is not constant high consumption in order to treat regular influenza.

In the event that large quantities of antiviral medication can be made available before a pandemic begins, plans for damage control must consider how, where and to whom the drugs will be distributed. At the outset, any distribution plan must be accompanied by a commitment to use antivirals appropriately in order to maximise and preserve their effectiveness. One concern is that, if doctors were to prescribe Tamiflu on demand well in advance of an outbreak, individuals would probably use their personal stockpiles in a chaotic fashion, rather than optimally for the purposes of pre-exposure prophylaxis, post-exposure prophylaxis, or treatment after influenza symptoms had appeared. In addition, much of the drug would likely be wasted on viral illnesses other than influenza.15 A second issue, related to the first, is that once tens of millions of people start taking Tamiflu, the drug might become less effective. In early 2005, H5N1 virus with high-level resistance to oseltamivir (Tamiflu) was isolated from two Vietnamese patients, both of whom died despite being treated with the antiviral drug.16
Regarding antiviral distribution at the national level, antivirals would need to be set aside for the exclusive use of two key groups: (1) medical professionals who would be required to keep health systems functioning during a pandemic; and (2) other employees whose work is essential to keep society at large functioning—for example, supermarket workers, truck drivers, police officers, and emergency services personnel. Individual governments would have to decide for themselves exactly who would be deemed ‘essential’, and priority-setting for the distribution of limited antivirals would largely come down to ethical judgements.

In addition, there may be an important international dimension to antiviral distribution planning. A bold alternative to national antiviral stockpiling would be to use an internationally-run stockpile—the Swiss-based pharmaceutical company Roche has already donated three million treatment courses (30 million capsules) of Tamiflu to the WHO—to combat a potentially pandemic virus at its source.17 If the H5N1 virus was initially not highly efficient at human-to-human transmission and therefore spread slowly, there might be a window of opportunity to extinguish it. The results of a simulation study published in Science in August 2005 suggested that a rapid, targeted response with antiviral drugs at the epicentre of an H5N1 influenza outbreak in Southeast Asia would have a high probability of containing the disease.18

However, there are at least two problems with this idea. First, the simulation scenario was based on some untested assumptions—for example, that the influenza virus would not be highly infectious, and that large quantities of drugs could in fact be distributed rapidly to the right people, even in remote villages.19 And second, even if the WHO were to recommend a strategy of pooling antivirals, wealthy countries might well be pressured by their own populations into deciding not to surrender this precious commodity in response to international cries for help. For example, in the event of human-to-human transmission commencing overseas, the Australian Government has stated that it will ‘consider requests from the WHO or other governments for assistance, and respond commensurately with the nature of the threat, without weakening Australia’s own capacity for action should the pandemic spread here’.20

It may be a political reality that, in the event of an influenza pandemic, poorer countries without antivirals would likely not have access to pharmaceutical defences until a vaccine was available. At this point, the advantage of vaccinating populations against pandemic influenza would be that it is much less expensive than administering antiviral medication and more effective at preventing the spread of disease. The downside, however, is that the vaccine development process could begin only once the influenza virus had started to spread, and the disease would probably have circulated the world before large-scale manufacturing could be initiated. From the time a virus capable of human-to-human transmission was isolated and analysed, it could be eight months or more into a pandemic before a matching vaccine was available.21 Arguably, the best response to the threat of a pandemic is to respond better to regular, non-pandemic influenza by ramping up vaccination rates. However, this would be a long-term solution dependent upon an expansion of world vaccine manufacturing capacity far beyond what presently exists.

**Australia’s pandemic plan**

Until such time as this capacity is greatly increased, Australia’s plan for responding to an influenza pandemic is to delay and contain the spread of disease until a vaccine is developed.
Containment measures in the updated Australian Health Management Plan for Pandemic Influenza\textsuperscript{22} (released at the end of May 2006) include:

- Border control and quarantine measures to reduce the risk of overseas travellers bringing a pandemic influenza virus into Australia.
- Adoption of basic infection control measures such as cough and sneeze etiquette, frequent hand washing, and the wearing of masks on public transport.
- Social distancing practices, such as avoiding public gatherings and short-term home quarantine for people exposed to an infected person.
- Targeted distribution of antiviral medication to people exposed or at continuous risk of exposure to the influenza virus.

To support its pandemic plan, Australia has a National Medical Stockpile (NMS) which includes:

- 3.8 million courses of Tamiflu;
- 50,000 bottles of Tamiflu suspension for children;
- 275,000 courses of Relenza (an inhaled antiviral drug);
- dedicated personal protective equipment for government workers at international airports;
- 40 million surgical masks for the health care system; and
- equipment to deliver 50 million vaccinations.\textsuperscript{23}

On the basis of epidemiological modelling, the government believes its strategy could delay the development of a pandemic within Australia by up to 12 months—thus hopefully allowing enough time to develop and produce a vaccine to protect the entire Australian population. By international standards the Australian plan is a good one.\textsuperscript{24} In particular, the recommended measures on taking personal responsibility for infection control are highly specific and sensible. However, some of the plan’s other features warrant further consideration.

Firstly, the government considers border control measures to be ‘an essential part of delaying the spread of a pandemic to Australia’, and has stated that such measures are likely to include: restrictions on travel to Australia from influenza-affected countries; home-based quarantine for Australians arriving from affected countries; health declaration cards for travellers; and thermal screening to determine whether a disembarking passenger has a fever.\textsuperscript{25} And in the early period after a pandemic virus arrives in Australia, public health authorities will implement ‘seek and contain’ measures ‘to find new human cases and identify people who have been in close contact with them’.\textsuperscript{26}

It is important to note, however, that the kind of drastic public health interventions which were successful in containing SARS are not likely to be as effective against influenza. This is largely because the micro-organisms that cause each disease behave differently—influenza is far more contagious than SARS, it has a shorter incubation period, and it can be transmitted at a different stage of infection. For example, infrared temperature screening devices at
airports were useful in the SARS outbreak because people carrying the disease developed fever symptoms before becoming infectious to others. Influenza, by contrast, may be transmissible before symptoms appear. For this reason, quarantine and isolation are also likely to be much less effective at containing influenza than was the case with SARS. Another important factor in determining the feasibility of disease control measures is generation time (Tg), which is the average time between a person being infected and infecting others. Influenza, which has a very short generation time (Tg = 3 days), spreads so rapidly that reactive control measures such as contact tracing are unlikely to be practical.

Secondly, in the event that containment fails (and a vaccine is still not available), the government has estimated that the number of people affected would be as follows:

- 13,000 to 44,000 deaths;
- 57,900 to 148,000 hospitalisations; and
- one million to 7.5 million outpatient visits.

This would place national health systems under severe and unprecedented pressure, and the government’s policy would be that ‘Australians should receive the best possible health care commensurate with the maintenance of a safe and secure society.’ The strategy of containment would likely switch to the maintenance of social functioning. To this end, state and territory governments might consider ‘closing schools and encouraging people to stay home from work if possible’. It may be more important, however, that some workers continue to work. How would Australian society cope, for example, if truck drivers were unavailable and food stopped appearing on supermarket shelves? This is a vital consideration because, as preparation for a pandemic, the government has advised Australians to ‘[h]ave enough fluids (juices, soups, etc.) and food on hand to last you and your family a week’. It is not clear how the government arrived at the conclusion that stockpiling a one-week supply of food and fluids was sufficient preparation for an influenza outbreak likely to last weeks or months. Possibly, the government is anticipating that Australians would choose to exceed whatever official advice they received.

Although it is impossible to predict precisely how the public would behave in response to a pandemic, it is clear that governments in some other countries expect severe social disruption. In Britain, for example, contingency plans for a pandemic include posting police at doctors’ surgeries and health clinics to stop panicking crowds from stealing antiviral medication. Police would also be placed on standby to prevent public disorder in the event that mass transport systems needed to be shut down or large sporting matches and concerts were cancelled. And in the United States, Centers for Disease Control and Prevention (CDC) director Julie Geberding has remarked that the military might be summoned to ‘maintain civil order’ in the event of an influenza pandemic. The challenge for governments generally, however, would be to respond effectively and in a way that did not exacerbate public fears. Heavy-handed response measures that do not have a clear public health justification may simply increase panic while doing little to contain the spread of disease. It is cause for concern, for example, that US President Bush has indicated that he would consider using troops to ‘effect a quarantine’ as part of the US response to a pandemic. Quarantine would likely not be as effective against influenza as it was against
SARS because the former can be transmitted from an infected person to others before that person starts to show symptoms. And the sight of troops on the streets may serve only to increase social anxiety during a pandemic.

Thirdly, a thorny question to which the Australian Government has yet to provide a good answer is: who should receive the influenza vaccine first if it is not immediately available to everybody? In the United States, the Department of Health and Human Services has made recommendations (subject to change depending on the epidemiology of the pandemic virus) about which age and occupational groups should have priority for vaccination. Frontline medical personnel, as well as vaccine production and distribution workers, are to receive top priority along with pregnant women, household contacts of severely immuno-compromised people, household contacts of children under 6 months old, emergency response workers, and key government leaders. Lower down the priority list are healthy people over 65 years old, healthy children aged 6–23 months, utility workers, transportation workers, telecommunications and IT workers. Below these groups are health decision-makers in government and funeral directors, and last of all are healthy people aged between 2 and 64.36

The US plan, based on a ‘save-the-most-lives’ principle, is comparable to the Australian plan which envisages that the resources of the NMS ‘will need to be triaged to provide the best outcome for the largest number of Australians’.37 If a vaccine is not available to protect the entire population against the pandemic before it spreads to Australia, the government’s plan is to make the vaccine available ‘first to people at high risk of exposure to the virus and providing essential services, then to people most vulnerable to severe illness from infection’.38 However, vaccine distribution founded on a utilitarian ethic of achieving the greatest good for the greatest number is by no means the only option.

In May 2006, two US bioethicists, Ezekiel Emanuel and Alan Wertheimer, published an article in *Science* which challenged the goal of prioritising vaccine distribution so as simply to save the most lives. They noted, firstly, that there are in fact many ethical principles for rationing health care. For example, ‘save the most lives’ is commonly used in emergencies such as burning buildings. ‘First come, first served’ operates in intensive care units when admitted patients retain beds despite the presentation of another patient who is sicker. ‘Save the worst-off’ is an ethic that plays a role in allocating organs for transplantation. And ‘save those most likely to fully recover’ guided principles for giving penicillin to soldiers with syphilis in World War II.39 Emanuel and Wertheimer themselves advocate a ‘life-cycle allocation principle’ as the most appropriate for a pandemic vaccine. Based on the idea that each person should have an opportunity to live through all stages of life, their model gives priority to people between early adolescence and middle age on the basis of the amount the person has invested in his or her life balanced by the amount left to live.40

It is beyond the scope of this article to assess which ethic would be best for Australia. However, it is clear that there needs to be much greater public consultation and discussion of how a limited supply of vaccine should be distributed. The advantage of encouraging Australians to think aloud about prioritisation is that this would enhance awareness and cooperation, as well as trust in government, in the event of a pandemic. If it transpires that some Australians receive vaccinations while others do not, people need to understand why.
Conclusion

The security significance of the H5N1 avian influenza virus lies in the possibility that it could soon mutate into a form transmissible between humans and thus cause a pandemic. Not only would a global outbreak of human influenza potentially result in wide-scale illness and death, its direct health effects would be compounded by attendant social anxiety and disruption. Part of the reason why pandemics have been so devastating in the past is that they descended upon human populations without warning. Now, for the first time in history, scientists have had a chance to monitor the prelude to a pandemic and there is a window of opportunity for individuals and governments to engage in physical and psychological preparation. With Australia’s national security possibly under threat from a microscopic influenza virus called H5N1, the government has deployed resources to limit opportunities for human-to-human transmission overseas and has devised a good plan for managing the domestic effects of a pandemic. However, there is time still for more discussion and preparation. In particular, despite the government’s hope that a pandemic influenza virus could be contained until a vaccine was available for all Australians, there needs to be more open debate and consultation on the prioritisation of vaccinations in the event that supplies are limited.

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NOTES


13. ibid., pp. 37, 41.


22. ‘Australian Health Management Plan for Pandemic Influenza’.

23. ibid., p. 48.


26. ibid., p. 35.


30. ibid. Emphasis added.

31. ibid., p. 36.

32. ibid., p. 43.


38. ibid., p. 37.


40. ibid., pp. 854–855.
BIBLIOGRAPHY


Enserink, Martin, 'Drugs, Quarantine Might Stop a Pandemic Before It Starts', Science 309, No. 5736 2005.


Ho, Mei-Shang, and Ih-Jen Su, 'Preparing to Prevent Severe Acute Respiratory Syndrome and Other Respiratory Infections', The Lancet Infectious Diseases 4, No. 11, 2004.


Mao Zedong, Meet Alfred Thayer Mahan: Strategic Theory and Chinese Sea Power

James Holmes and Toshi Yoshihara

Western analysts are fond of using the Great Wall as a metaphor for Chinese diplomatic and military strategy. Built to defend against the nomadic raiders who harried China’s northern frontier for centuries, this imposing stone edifice was clearly meant for passive defence. When they deploy the Great Wall metaphor, Western commentators thus imply that China will content itself with defensive ends and means, which supposedly conform to its strategic traditions, more or less permanently. But it is possible to remain on the strategic defensive while using offensive means. Indeed, this approach to military affairs has been a staple of Chinese strategic thought since the 1930s, if not before.

The United States, currently the pre-eminent power in Asia, and its allies overlook the strategic worldview of China—a rising power and a potential competitor in the region—at their peril. China–watchers’ assumption that Beijing will remain on the defensive has tangible consequences for US and allied policy, strategy, and force structure in East Asia. It bears re-examining, lest Washington and other friendly capitals mistake Beijing’s actions or find themselves ill-equipped to cope with China’s evolving foreign policy and supporting military strategy.

Consider The Great Wall and the Empty Fortress, in which Andrew Nathan and Robert Ross declare that China has adopted a ‘Great Wall strategy’ derived from ‘the perception that one controls territory by surrounding it’. Beijing’s military strategy, say Nathan and Ross, ‘is one of protracted defensive resistance’ which concedes that likely opponents will have pronounced edges in ‘mobility, concentrated force, and explosive violence’. If China applies the Great Wall logic they describe to nearby waters—if it attempts to ‘surround’ and control these waters—will Beijing adopt defensive strategies and tactics? Yes, say Nathan and Ross. American naval mastery leaves China no alternative: ‘The United States possesses strategic superiority throughout Asia. Its navy faces no challenger’, least of all China’s. Their overall prognosis, then, is for a prolonged period of Chinese weakness. China will not rule the waves any time soon—and sees no pressing reason to do so.

The myth underlying the Great Wall analogy

These predictions of Chinese maritime passivity do not hold up under scrutiny. Nathan and Ross make a convincing case that Chinese strategists apply the Great Wall metaphor to the East Asian littoral. Chinese thinkers steeped in the geopolitical thought that has informed Chinese foreign policy throughout the communist era—a mode of thinking shaped in part by the Great Wall—will tend to look at the seas as an expanse to be surrounded and controlled. While this metaphor may guide China’s grand strategy, however, it says little about the military strategy and tactics China will use in its bid to surround and control the nautical expanses adjacent to its coasts, let alone about which expanses engage Chinese interests.
Mao Zedong, the Chinese Communist Party (CCP) chairman who etched his distinctive strategic outlook on contemporary China through personal example and extensive writings on political and military affairs, was famously indifferent to maritime pursuits. Yet China’s current maritime strategy, ‘offshore active defence’, takes both its name and its guiding precepts from Mao’s doctrine of ‘active defence’, an approach to warfighting distilled from his experiences waging land warfare against Japanese and Chinese Nationalist armies. To Chinese eyes, US mastery of East Asian seas bears a striking resemblance to the Nationalist Army’s strategy of ‘encirclement and suppression’, albeit at sea rather than ashore. Suitably adapted, the strategy Mao’s Red Army deployed to counteract the Nationalists’ encirclement and suppression campaigns can apply to naval combat, and evidence suggests that many Chinese strategists do transpose his land–warfare strategy to the East China, Yellow, and South China seas.

What was active defence? The Red Army did not reply to the Nationalist ground offensives through ‘protracted defensive resistance’ but by stretching out the war, tiring the Nationalist enemy, and shifting the balance of forces in its favour as a precursor to a counteroffensive that would bring a decisive victory. Nathan and Ross thus mistake Mao’s dictum that ‘protracted war’ meant avoiding losses—that is, risking no engagements in which victory was not assured—for resignation to perpetual military inferiority. These Western analysts assume that American supremacy makes all naval battles unwinnable for Beijing, and thus that Beijing, abiding by Mao’s strategic wisdom, will refrain from confronting fellow Asian navies, including the US Navy, beyond Chinese territorial waters.

But, judging by their words and by the force structure taking shape at Chinese shipyards and defence installations, Chinese strategists will look not to ‘protracted defensive resistance’ as they seek to defend nearby waterways, but to great strategic thinkers of not only the Eastern but the Western traditions. Indeed, strategists in Beijing now pay tribute not only to Mao but to the sea power theories of Alfred Thayer Mahan, who over the years has inspired not only the United States but a variety of European and Asian nations to pursue the muscular brand of sea power he espoused. Mahan seemingly furnishes the geopolitical logic for an offensive Chinese grand strategy, while Beijing looks to the doctrines of Mao for the strategies and tactics needed to execute a Mahanian grand strategy. In a sense, then, China is applying concepts distinctive to land combat to naval combat.

For Mao Zedong the defensive was a temporary expedient, not a permanent, still less a desirable, state of affairs. If Beijing does heed his advice, then, the exigencies of a cross–strait contingency over Taïwan, to name the most likely flashpoint, should give both US and Australian naval planners pause. It behoves Canberra and Washington to consider seriously the prospect that Beijing will adopt a Mahan– and Mao–inspired naval strategy in its littoral waters and to devise their own strategies with this prospect in mind.

China turns to the high seas

An assessment of how Mahanian and Maoist strategic traditions intersect with Chinese maritime strategy must start from an appreciation of why China is turning its attention to the seas. For one thing, it increasingly has the capacity to do so. The overland threat to Chinese security, which has preoccupied Chinese strategists for centuries, is negligible today—freeing up resources that might
otherwise be needed to guard the nation's land frontiers. The collapse of the Soviet Union freed
China from worrying about a land–based military thrust into the Chinese heartland that could
have spiralled into regional or general nuclear war. Beijing has moved assertively on the diplomatic
level to consolidate this hospitable situation, settling lingering border disputes with Russia, the
Central Asian republics, Vietnam, North Korea, Mongolia, and, most recently, India. It can now
contemplate becoming a sea power without undue fear of forfeiting its interests ashore.

For another, it perceives a pressing need to turn its gaze seaward. With the ideological appeal
of communism in decline, Chinese leaders have staked their legitimacy on improving the
standard of living for as wide a swathe of the populace as possible. The imperative for economic
development has induced Beijing to search out supplies of oil and gas as far away as the Persian
Gulf and the Horn of Africa, and to cast anxious eyes on the sea lines of communication that
convey raw materials into Chinese seaports. The security of the waterways adjacent to China’s
coastlines, consequently, has taken on policy importance for Beijing. For top Chinese leaders,
assuring free navigation in the Yellow, East China, and South China seas is a matter of overriding
importance. Indeed, it is crucial to their political survival. They hesitate, understandably, to
entrust this vital interest to the uncertain goodwill of the United States, the self–appointed
guarantor of maritime security in East Asia.

To China the first island chain, which runs roughly parallel to the Chinese coastline, from southern
Japan through Taiwan to the Philippines, looks suspiciously like a barrier erected by an America
intent on containing Chinese maritime aspirations. Chinese commentators point to Secretary of
State Dean Acheson, who in 1950 sketched an American ‘defence perimeter of the Pacific’ that
more or less coincided with the first island chain. They recall uneasily that the United States
based surveillance and nuclear–capable tactical aircraft at Taiwanese airfields until the 1970s,
when Washington withdrew diplomatic recognition, along with US forces, from the island.

Sea power advocates, then, will tend to regard the island chain as an impediment to Chinese
maritime operations, and thus to China’s economic vitality, so long as it remains in unfriendly
hands. Gaining control of the island chain would help the People’s Liberation Army (PLA)
erect its own Great Wall at sea, a barrier to foreign exercises of naval and military power in
contiguous seas. If PLA forces could operate at will among the islands, on the other hand, China
would in effect have obtained its own offshore defence perimeter. Forces operating from the
mainland, island bases, or adjacent waters and airspace would be able to at least give pause
to any foreign naval power that contemplated hostile entry into these waters.

But the islands also have offensive value to Beijing as it looks out into the Pacific. Chinese thinkers
recall General Douglas MacArthur’s description of Taiwan as ‘an unsinkable aircraft carrier’ off
China’s coasts, at times appending ‘and submarine tender’ to MacArthur’s metaphor. In short,
Beijing is acutely sensitive to the geopolitical value of the offshore island chain from both the
defensive and offensive standpoints. China’s nautical Great Wall is no passive edifice.

**China’s 2004 Defence White Paper**

China has transcribed this geopolitically driven maritime strategy into official policy. In
December 2004 the Chinese Government published its fourth Defence White Paper, *China’s
National Defense in 2004, its most detailed and transparent appraisal yet of China’s security environment and the policies Beijing believes will best cope with that environment. Strikingly, the document directs the People’s Liberation Army to build a force structure capable of ‘winning both command of the sea and command of the air’ along China’s periphery. This represents Beijing’s first mention of command of the ‘commons’—the seas, skies, and space—in an official directive. In particular, the paper orders the PLA Navy to acquire new warships, aircraft, precision armaments, and information technology to support its bid for command of the sea (zhihaiquan).

China’s National Defense in 2004 represents the most authoritative public statement yet of China’s national security policy. A panel of distinguished China scholars affirmed that the document had been fully vetted and approved by state, CCP, and military organs. These scholars contradicted Nathan and Ross’s prediction that the PLA will settle for ‘protracted defensive resistance’ in Chinese territorial waters. They prophesied that the PLA Navy will cast its gaze seaward. The only question was how far:

Left unstated was how far off the Chinese littoral these aspirations extend. To the degree that these aspirations extend into the Pacific, it could augur an incipient competition over the international commons of the East Asia littoral with the United States, in the areas in which the US has long held superiority.

China’s leadership, then, has set out boldly to implement its new strategy, not only by clearly enunciating a strategic vision, but by building this vision into strategic doctrine, force structure, and personnel policy. Chinese force acquisitions are tailored to this doctrine; so are promotions within the PLA, which in recent years have favoured officers from the PLA Navy, Air Force, and Strategic Rocket Forces over their Army brethren. The PLA’s top leadership, in short, will exhibit an increasingly maritime outlook in the coming years.

Mahan’s logic of offensive sea power

As noted earlier, Alfred Thayer Mahan supplies beguiling geopolitical arguments for offensive sea power. Mahan’s writings have given rise to a vocal school of thought within China’s defence community. For him sea power rested on the ‘three pillars’ of overseas commerce, naval stations along the sea lines of communication, and merchant and naval fleets. The sea, he proclaimed, was a ‘wide common, over which men may pass in all directions’. ‘Communications’, meaning secure passage through this watery medium, was ‘the most important single element in strategy, political or military’. The ‘eminence of sea power’ thus lay in its ability to control the sea lanes, along with critical geographical nodes that facilitated or impeded the flow of commercial and naval shipping. Building a canal across the Central American isthmus and obtaining Caribbean bases from which to safeguard the approaches to the canal preoccupied him. The ability to ensure communications ‘to one’s self, and to interrupt them for an adversary, affects the very root of a nation’s vigor’, concluded Mahan.

Mahan vehemently denied that he craved battle on the high seas—‘military or political force’, he insisted on one occasion, was an ‘alien element’ in international relations—but his works certainly lend themselves to the kind of bellicose reading common in today’s Beijing.
‘Command of the sea,’ he maintained, meant ‘that overbearing power on the sea which drives the enemy’s flag from it, or allows it to appear only as a fugitive; and which, by controlling the great common, closes the highways by which commerce moves to and fro from the enemy’s shores.’21 How was dominant sea power to be exercised? ‘The offensive element in warfare’, declared Mahan, ‘is the superstructure, the end and the aim for which the defensive exists, and apart from which it is to all purposes of war worse than useless. When war has been accepted as necessary, success means nothing short of victory; and victory must be sought by offensive measures, and by them only can be insured.’22

Applying Mahan’s logic to Chinese strategic thought

Mahan furnishes both the logic23 and the vocabulary to argue for assertive sea power. Proponents of this school of thought write and speak in avowedly Mahanian terms, and in many cases they explicitly cite his works to justify an ambitious maritime strategy. In particular, his portrayal of sea power as ‘overbearing power’ pervades these Chinese thinkers’ discourse on maritime affairs. Should the Mahanians win out among the cacophony of voices clamouring for the attention of senior policymakers, Chinese strategy will take on distinctly offensive overtones.

Perhaps the most thoughtful spokesman for the Mahanian school is Professor Ni Lexiong of the Research Institute of War and Culture, Eastern China Science and Engineering University. Professor Ni uses sea power theory to evaluate the competing claims of the advocates of sea power and the advocates of globalisation. The latter, he contends, believe that:

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\text{China should not act by following the traditional sea power theory in pursuing a strong Navy, because today’s world situation is different from the time of Mahan...that the globalisation of the world’s economy has made various countries’ interests interconnected, mutually dependent on each other to a greater degree, and that if a country wants to preserve its life line at sea, the only way to do so is to go through ‘cooperation’ rather than the traditional ‘solo fight’.}^{24}
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Globalisation theorists, says Ni, urge Beijing not to embark on a naval arms buildup. To do so would alert ‘today’s naval hegemon’, the United States, ‘making China’s naval development a self–destructive play with fire’, reminiscent of Imperial Germany’s quixotic bid for sea power at the turn of the 19th century.25

The author hedges by allowing for the possibility that the world is entering a Kantian era of perpetual peace, as many globalisation enthusiasts maintain, but he postulates that even a pacific international system will ultimately depend on force. In either case, then, China should build up its naval forces. If the globalisation theorists have it right, China will need a muscular PLA Navy if it is to play its part in the ‘world Navy,’ when one emerges, and to help along the transition to a peaceful international order.

Ni clearly believes, however, that the world has not yet evolved beyond its Hobbesian state, in which nations must maintain powerful military forces as a means of self–help. Thus ‘it is China’s necessary choice to build up a strong sea power’ to guard against ‘the threats to our “outward–leaning economy” by some strong nations’—code for the United States—in the lingering ‘Hobbesian era’ he perceives.26 He reminds his readers of China’s humiliation at
Japanese hands in 1894–95, when a powerful Japanese battle fleet crushed that of the Qing Dynasty. ‘The key to winning that war was to gain the command of the sea’, he proclaims. Today’s China should emulate Imperial Japan’s example, keeping in mind that Mahan ‘believed that whoever could control the sea would win the war and change history; that command of the sea is achieved through decisive naval battles on the seas; that the outcome of decisive naval battles is determined by the strength of fire power on each side of the engagement’.27 This is scarcely the language of someone predisposed to ‘protracted defensive resistance’ behind an oceanic Great Wall. If indeed this sort of thinking prevails in policy circles in Beijing, Washington and its Asian partners must come to terms with China’s newly assertive naval strategy.

Mao’s grammar of sea power: ‘active defence’

However useful his geopolitical theorising and his advocacy in general terms for sea power—one historian called him America’s ‘evangelist of sea power’28—Mahan’s prescription for battles between big-gun battleships holds little relevance for today’s age of high-tech naval combat.29 Nor do analysts such as Ni draw any evident lessons from his works on the details of how to wage war at sea, beyond the injunction to mass combat power at critical points to prosecute decisive fleet engagements.

Rather, China’s emerging maritime strategy will in all likelihood draw its inspiration from China’s tradition of land warfare. While he evinced little interest in sea power, Mao Zedong shared Chinese sea power proponents’ scorn for the notion of passive defence. This remained true during the long years when his Red Army was vastly inferior to its enemies and of necessity remained on the defensive. Mao’s military writings were unambiguously offensive in character. He insisted that passive defence represented ‘a spurious kind of defence,’ and that ‘the only real defence is active defence’. By this he meant ‘offensive defence’ or ‘defence for the purpose of counter-attacking and taking the offensive’.30 For him even defensive aims were best attained by offensive means. He viewed ‘protracted defensive resistance’ as envisaged by Nathan and Ross as a transient measure dictated by an unfavourable balance of forces—not the core of China’s national strategy, let alone its strategic preference.31 They misinterpret Mao’s writings on protracted war, a form of warfare in which the weaker party deliberately extended a conflict in hopes of sapping the stronger party’s will to fight, as an endorsement of passive means. For the CCP leader, clearly, resort to the strategic defensive did not limit military strategy or tactics to the purely defensive or passive.

Mao Zedong foresaw that his theory of protracted war might be misread in this fashion, and took pains to distance himself from the kind of passive approach connoted by Western analysts’ Great Wall metaphor. ‘Only a complete fool or a madman’, he proclaimed, ‘would cherish passive defence as a talisman’. Rather, active defence referred to the art of preparing the conditions for a strategic counteroffensive culminating in a decisive engagement:

As far as I know, there is no military manual of value nor any sensible military expert, ancient or modern, Chinese or foreign, that does not oppose passive defence, whether in strategy or tactics... That is an error in war, a manifestation of conservatism in military matters, which we must resolutely oppose.32
Mao was writing of the encirclement–and–suppression campaigns waged by Chiang Kai–shek’s Nationalist forces during the civil war. Despite the mismatch in the Nationalists’ favour from a material standpoint, Mao’s Red Army deployed a strategy premised on the artful use of direct and indirect attack (cheng and ch’i), in the best tradition of Sun Tzu, one of Mao’s favourite strategists.33 Ultimately, after biding their time on the strategic defensive, the communists were able to shift the balance of forces in their favour, take the strategic offensive, and prevail.

This represented a dexterous approach to warfare. ‘Militarily speaking,’ Mao counselled his countrymen, ‘our warfare consists of the alternate use of the defensive and the offensive.’ A period of strategic retreat was in order at the outset of a defensive campaign—but this was only to allow the retreating side to prepare a powerful counterblow:

...defensive warfare, which is passive in form, can be active in content, and can be switched from the stage in which it is passive in form to the stage in which it is active both in form and in content. In appearance a fully planned strategic retreat is made under compulsion, but in reality it is effected in order to conserve our strength and bide our time in order to defeat the enemy, to lure him in deep and prepare for our counter–offensive.34

Mao likened Chinese communist forces to a ‘clever boxer’ who ‘usually gives a little ground at first, while the foolish one rushes in furiously and uses up all his resources at the very start, and in the end he is often beaten by the man who has given ground’. He quoted Sun Tzu, who urged, ‘Avoid the enemy when he is full of vigor, strike when he is fatigued and withdraws,’ approvingly.35 Having fallen back on a predesignated base area, both to weary their opponents and to concentrate force, the defenders would strike back in a vigorous counteroffensive.

There was a pronounced geospatial component to Mao’s theorising about active defence. Writing about the Sino–Japanese War, he observed that Japan, the invading power, operated on ‘exterior lines’ in an effort to envelop the defending Chinese, who operated on ‘interior lines’. Then as now, the prospect of encirclement fuelled anxieties among Chinese leaders and stimulated thought about countermeasures. The US Army defines interior and exterior lines thus:

A force operates on interior lines when its operations diverge from a central point. With interior lines, friendly forces are closer to separate enemy forces than the enemy forces are to each other. Interior lines allow a weaker force to mass combat power against a portion of the enemy force by shifting resources more rapidly than the enemy. A force operates on exterior lines when its operations converge on the enemy. Operations on exterior lines offer the opportunity to encircle and annihilate a weaker or less mobile enemy; however, they require stronger or more mobile forces.36

Relegated to the interior lines, Chinese communist forces typically fought at a disadvantage relative to their adversaries. Even so, maintained Mao, it was ‘possible and necessary to use tactical offensives within the strategic defensive, to fight campaigns and battles of quick decision within a strategically protracted war and to fight campaigns and battles on exterior lines within strategically interior lines’. While he was analysing the guerrilla campaign against Japan, he assured his readers that this maxim ‘holds true both for regular and for guerrilla warfare’.37
To wage such micro-level offensives within a macro-level defensive campaign, Mao advised commanders to position their forces at strategic points where they could deplete and exhaust enemy forces and vanquish them piecemeal. ‘Concentrate a big force to strike at a small section of the enemy force’ and annihilate it, he advised. It was better to cut off one of an enemy’s fingers entirely than to injure them all. Interior lines had their advantages.

Mao Zedong’s strategic wisdom applies to sea as well as land combat. Prompted by Mahan and Mao, Chinese naval strategists such as Ni Lexiong now talk routinely of prying control of the waters within the first island chain from the US Navy’s grasp. They intend to surround and control these waters by offensive means, even while the United States retains its overall mastery of Asian waters. Indeed, it is increasingly common for Chinese strategists to urge Beijing to seize ‘absolute control’ of the seas within the island chain—giving Nathan and Ross’s notion of a passive Great Wall strategy an ominous twist.

**Applying Mao’s active defence to offshore operations**

The concept of ‘sea denial’ furnishes perhaps the best indicator of how China will put its Mao-inspired naval strategy into practice. A navy intent on sea denial seeks to impose conditions that deter or prevent an adversary from operating within a given nautical expanse for an extended period. Generally speaking, sea denial is a strategically defensive stance taken by inferior naval powers—the PLA Navy’s predicament for the foreseeable future—but the operations and tactics used to execute the strategy are offensive in orientation. Such an approach conforms philosophically both to Mao’s concept of active defence, which yoked offensive means to defensive ends, and to Mahan’s injunction for even inferior navies to impose command of the sea in waters of vital interest.

The Chinese military already possesses or plans to acquire capabilities useful for prosecuting a sea denial strategy in littoral waters and airspace. Since the early 1990s, China has purchased arms from Russia lavishly while pressing ahead with an array of indigenous programs. The result: a leap in offensive combat power suitable for sea denial. Sophisticated warships armed with anti-ship missiles and next-generation air-defence radars and missiles—designed to increase their survivability against long-range air strikes—increasingly form the backbone of the Chinese surface fleet. Modern diesel submarines, difficult to detect and track in the littoral environment, are entering service in significant numbers. More accurate and longer-range ballistic and cruise missiles, advanced ground-based air-defence systems, and capable naval fighter/attack aircraft are some of the other key features of China’s military modernisation effort. If the Chinese package these assets wisely and develop the requisite tactical proficiency, they will gain confidence in their ability to deter or defeat any foreign power that contemplates hostile entry into nearby waters.

Interestingly, many of China’s emerging military capabilities, including anti-ship missiles, air-defence systems, and attack aircraft, are designed to launch strikes against targets along the littoral from bases on the mainland. This approach would exploit China’s deep continental interior, which in effect furnishes a safe haven from which to mete out punishment against intruding forces operating along the coastline. Its possession of such a haven would also allow Beijing to dare an adversary to launch strikes against the mainland—and risk seeing a
limited conflict at sea escalate to full-blown war, with repercussions disproportionate to this adversary’s presumably modest strategic goals.

In other words, a PLA that exploited the mainland’s vast strategic depth would have the luxury of waiting for enemy forces to enter the combat range of its weaponry—compelling an adversary to seek battle on China’s geographic and military terms. Such a strategy would certainly have found favour with Mao, who urged his followers to ‘lure him in deep’, much as the savvy boxer of whom he wrote gave ground while readying a counterpunch.47

How would China use its panoply of new hardware for sea denial? Beijing’s purchase of (and efforts to reverse engineer) the fearsome S–300 Russian air–defence system is suggestive. The FT–2000, an indigenous, anti–radiation variant of the S–300, will likely be deployed near the Taiwan Strait to target Taiwanese forces and deter US military intervention in a cross–strait war.48 The FT–2000, which is reportedly nearing production, has earned the nickname ‘AWACS killer’ owing to its mission of attacking the airborne sensors and electronic–warfare assets on which US air superiority relies in wartime.49 China’s newest air–defence warships will be outfitted with similar surface–to–air missiles.

US defence planners have ample reason to worry about these systems. The American way of modern warfare (showcased in Afghanistan, the two wars against Iraq, and other conflicts of the past decade) is premised on the ability to win the contest over battlefield information at the outset of a conflict. US forces have prevailed in recent wars in large part because superior technology gives them a ‘common operating picture’ of conditions in the battlespace that no opponent can match. Airborne sensors detect and target multiple enemy aircraft across long distances; jammers and anti–radiation missiles incapacitate enemy sensors attempting to gather data and target US assets. These tactics effectively paralyse US adversaries during the opening phases of a military campaign, paving the way for an even more important battlefield condition: air supremacy.

Since the dawn of carrier warfare, US naval strategy has viewed command of the air as a prerequisite for surface fleet operations. An operation near Chinese shores would be no different. If Chinese air defences completely or partially negated the US edge in information warfare, consequently, they would slow down and complicate the efforts of US aircraft to establish dominance over the skies—blunting US offensive action and leaving US warships, including aircraft carriers, vulnerable to air and missile counterstrikes. Robust Chinese air defences would obliged the United States to devote more energy to securing the skies. Deft use of even an inherently defensive and passive weapon such as the FT–2000, then, would open the way for the Chinese to conduct offensive operations in Mao Zedong’s sense.

Beijing would use its air defences in concert with other forces. If the PLA managed to compel US forces to look skyward, assuming a more defensive posture, it could then pose additional challenges with attack submarines and missile–armed surface vessels. A well designed force package would present US forces with a three–dimensional threat environment featuring multiple threat axes. The more stresses the Chinese can impose, the less likely US forces will be to venture into the waters landward of China’s nautical Great Wall. Washington’s operational calculus has long been predicated on uncontested access along the Asian mainland. If China can even partially cancel out US technologies that manage the fog of war, it can severely curtail US
forces’ freedom of manoeuvre in this littoral milieu. The combined effect would be to induce US forces to operate farther from Chinese shores—helping China achieve its goal of sea denial.

One caveat is worth stating: none of these capabilities, alone or combined, would give China a decisive edge in littoral warfare, let alone outright military superiority over the United States. Rather, as Mao sagely advised, the PLA will leverage its operational and tactical advantages in an offensive manner, imposing costs sufficient to achieve strategically defensive aims. If Beijing can deny US forces the ability to dictate events, it will have fulfilled the most important goal of its sea denial strategy, imposing local dominance at sea and aloft.

Implications for Australia: Thinking through a Taiwan scenario

Why is Taiwan a useful case study for understanding the Mahanian logic and the Maoist grammar of China’s maritime strategy? From a Mahanian vantage point, gaining possession of Taiwan, which anchors the midpoint of the island chain described earlier, would extend China’s defence perimeter outward, in effect enclosing the vital Yellow, East China, and South China seas. Taiwan would constitute a defensive barrier against foreign naval powers, in effect turning Dean Acheson’s defence perimeter outward. Chinese forces based on the island, moreover, would have the luxury of radiating power in every seaward direction, enhancing China’s capacity to take offensive action in defence of these waterways. If the PLA occupied Taiwan, moreover, it would extend its seaward reach by at least two hundred kilometres from the mainland’s coasts. Pace Douglas MacArthur, the island would furnish a platform from which to assert control over the oceanic approaches to the Chinese coast. In short, Beijing will feel hemmed in behind the island chain until it wrests control of Taiwan from the island’s inhabitants. Once safely under Chinese control, the island will nearly double the PLA’s radius of action.

From a Maoist perspective, China’s littoral seas would make an ideal theatre for prosecuting micro–level offensive operations within the macro–level defensive campaign the PLA will face so long as the United States and its allies in the region maintain their overall maritime supremacy. This would be doubly true were Beijing to gain control of Taiwan. PLA forces stationed on the island would confront US forces converging on China’s littoral seas. The PLA would enjoy the interior lines in such a campaign and thus would stand a good chance of throwing its forces against individual US or allied units to the north or south of the island—and thus, in Mao’s parlance, of unleashing an exterior–line tactical operation that would smash one of America’s ‘fingers’, exacting a high political price for operating in China’s environs. Taiwan thus represents a geopolitical prize that Beijing cannot ignore.

While ample literature details how a conflict over the island would unfold, it is worth revisiting this scenario in the context of China’s offshore–active–defence posture. Beijing’s theatre objectives vis–à–vis the United States are twofold: (1) to deter US intervention or, failing that, (2) to defeat and drive off any US Navy forces that venture into the waters surrounding Taiwan. Should deterrence fail, the PLA would likely deploy an offensive strategy made up of several operational prongs:

- Surface fleet action in the Taiwan Strait to clear out the Taiwanese Navy, raise the costs to the US Navy of operating in the Strait, ideally to a level unacceptable to Washington, and thereby achieve local sea superiority.
• Offensive counter-air operations using shore-based fighter aircraft and surface-to-air missile systems, including the FT-2000, to hold off US, allied, and Taiwanese aircraft over the Taiwan Strait. According to the Pentagon, China's surface-to-air missiles will soon provide coverage over the entire Strait, if they do not already.50

• Ballistic-missile strikes on US carrier strike groups headed toward Taiwan. The PLA would also fire ballistic missiles at US bases in Okinawa and Guam to harass and slow the operational tempo for reinforcements preparing to surge to the Taiwan area. Such attacks would be part of a coercive strategy designed to induce Tokyo to deny Washington the use of these bases for offensive operations.

• Submarine operations in the Strait and athwart the approaches to Taiwan, impeding US access to the theatre. It is at least conceivable that PLA Navy submarines would deploy beyond Taiwan to interdict forces departing from Japan, Guam, and the continental United States. Chinese submarines armed with land-attack cruise missiles might even attempt independent strikes against bases in the Pacific.

Given the littoral and maritime nature of a Taiwan conflict, China could impose high costs on US and allied naval forces, which must overcome the tyranny of distance in the Pacific. Even Guam, the closest US territory in-theatre, is more than 1,500 nautical miles from Taiwan. At such distances, absent robust aerial refuelling capabilities, US air forces would find it difficult if not impossible to maintain a sortie rate sufficient to amass credible air power at the critical point.51 Even air operations from (relatively) nearby Okinawa would stretch the operational capacity of US air assets. Taking its cue from Mao Zedong, the PLA probably would not attempt to halt the US military advance altogether. An orderly strategic retreat that slowed US forces down, however, would allow China to attempt to settle the Taiwan matter on its own terms while readying a counteroffensive should the United States persevere despite the costs it would incur from fighting in China's geographic backyard.

However unpleasant it may be to contemplate a conflagration with a major regional military power, it behooves Canberra to consider the role Australia could play in a face-off over Taiwan. As one of the stewards of Asian security, Australia clearly has a major stake in understanding the dynamics of a potential conflict between China and the United States. Unsurprisingly, Australia’s record as a trustworthy US ally and an active participant in global security affairs has generated expectations in both capitals that Canberra will help Washington in some way during a cross-strait contingency. And it might need to move quickly. China’s ‘missile diplomacy’ against the island a decade ago illustrates how misperception and miscalculation can quickly escalate into a military standoff. Simply put, confrontation over Taiwan is a very real prospect and could occur at short notice. Canberra thus must be prepared for the worst.

At a more hypothetical level, a Taiwan scenario could serve as a useful analytical template for assessing how, having resolved its immediate dilemma over the island, China might employ its sea denial strategy in the South China Sea, an area of vital interest to Australia.

China’s importance to Australia’s economic wellbeing has spawned fears of being dragged into a confrontation with a major trading partner and Asia’s most influential regional player.52 Australia is increasingly wary of US entrapment, the classic dilemma for a junior ally. As a result, top decision makers in Canberra have sought to differentiate their nation’s China policy from that of the United States. In August 2004, during a state visit to China, Foreign Minister Alexander Downer declared that a US–China conflict over Taiwan ‘does not automatically invoke the
ANZUS [Australia, New Zealand, and the United States of America] treaty.” Downer’s words touched off a furore in Washington, arousing speculation that Australia was drifting toward China. Nor was this an isolated event. Prime Minister John Howard, who has won American plaudits for his staunch support of the US–Australian alliance, delivered several high-profile speeches expressing his belief that China’s rise is not inherently destabilising and that Sino–US competition is not inevitable. Howard even offered to mediate between the two powers. Sensing an opportunity, China has brought pressure on Canberra to review whether and how the ANZUS alliance would apply during a war over Taiwan.

Several factors suggest that, forced to decide, Canberra would defy Chinese pressure, siding with Washington in a Taiwan conflict. First, in the event of a contingency, US credibility in the region and, by association, the credibility of the US–Australian alliance would be on the line. As Michael Horowitz observes, ‘the perception that the balance of interests over Taiwan favours China, meaning there is less cost to angering America on the Taiwan issue, wrongly underestimates the importance of Taiwan as a test of US credibility in Asia… The United States will want a military commitment from all of its Asian allies, especially Australia, if tensions in the Taiwan strait rise once again.’ Second, cooperation with the United States vis-à-vis China provides a useful strategic hedge. Uncertainty shrouds China’s future development. Canberra needs a powerful security partner to cope with a rising China that could bid for regional hegemony. Third, Australia is the only power in Asia (with the dubious exception of Japan) that has both ample capability and ample political will to augment US combat power. After the 9/11 terrorist attacks, the Australian Defence Force (ADF) opted to use offshore deployments to meet global threats. The end result was to further enhance the ADF’s compatibility with US forces. Finally, the alternative is unpalatable, plain and simple. If Australia hesitates in a crisis, the alliance could suffer irreparable damage, leaving Canberra isolated in a neighbourhood (which Australian analysts dub the ‘arc of instability’) where it cannot count on the amity of its neighbours.

If Australia surmounts these political obstacles, coming to the assistance of the United States in a cross-strait contingency, what will be some of its operational priorities and considerations? The Australian Defence Force is modest in size but boasts several niche capabilities that are in short supply in the US arsenal. Given careful planning, the ADF’s air and naval forces could play a role in a cross-strait conflict disproportionate to their size. Many Australian military assets could be deployed to counteract China’s sea denial strategy during such a contingency. In the air, the ADF’s P-3 Orions would shore up America’s intelligence, surveillance, and reconnaissance (ISR) and anti-submarine-warfare capabilities, which have atrophied since the Cold War. The venerable Boeing 707 aerial refuelling tankers and their next-generation successors, which are expected to enter service within the decade, would extend loiter times for US combat aircraft operating near the Taiwan Strait, enabling US aviators to keep up a quicker pace of operations. Australian fighter aircraft could perform combat air patrols from airfields on Guam or Okinawa, assuring allied air superiority near the theatre of operations. The six new airborne early warning and control aircraft (the first of which was delivered in January 2006), moreover, could play an important role in the contest over battlefield information. On the high seas, the ADF’s surface fleet would bolster the US Navy’s ability to wage air, surface, and undersea warfare. In particular, naval aviation units attached to ADF frigates would provide surface surveillance coverage while prosecuting anti-surface and anti-submarine warfare operations. Australia’s Collins class attack submarines could erect a defensive screen against Chinese submarine forces seeking to launch land-attack cruise missiles against Okinawa or Guam.
Over the longer term, Australia’s decision to take part in US–led efforts to develop ballistic missile defences and its expected purchase of Aegis destroyers could pay off for combined strategy in East Asia. For example, the Jindalee over the horizon radar system currently undergoing trials will improve the ADF’s ability to detect missile launches during the boost phase and to provide early warning. Linked to the Jindalee network, Aegis warships would provide protective cover against air and missile attacks on US forces in transit to the region.61

In all likelihood the ADF would not serve as a frontline combat force in a cross–strait contingency, owing to the high intensity threat environment in and around the Taiwan Strait and the attrition rate forces operating in these waters would likely suffer. Instead, Australian assets would function best in rear areas, supplying force protection, ISR assets, and logistical support to allied units transiting the South China Sea and to aircraft launched from Okinawa, Guam, or afloat. Beyond the operational value of such support efforts, they would convey an image of US–Australian solidarity whose political worth should not be underestimated. Direct Australian involvement could embolden Japan, which would undoubtedly be subjected to Chinese diplomatic or military coercion, to permit the use of bases near the theatre of action—particularly Kadena Air Force Base in Okinawa. Were Tokyo to refuse US forces access to bases on Japanese soil, Canberra would be able to partly offset the ensuing shortfall in allied military capability.

Investigating the writings of great strategic theorists, as well as the impact of these theorists on contemporary Chinese maritime strategy and force structure, can help Australian defence planners fathom how the People’s Liberation Army will fight in the waters and airspace adjacent to Chinese shores. Analysis of this type also illuminates the likely shortcomings in the US military’s counterstrategy and the ways the Australian Defence Force can help remedy these shortcomings. As Australian strategists draw up plans for a cross–strait contingency, then, they should bear in mind that ideas matter, in war as in politics.

A final cautionary note

It is time to dispense with the blithe, all–too–common assumption that the United States and its allies will effortlessly dominate the seas near China, a rising great power. Worrisome trends in Chinese strategic thought and capabilities should dispel such confidence. Beijing is not fated to remain on the defensive at sea. Nor are many Chinese officials and thinkers inclined to do so, judging from the way they read and apply the theories of Alfred Thayer Mahan and Mao Zedong. If the United States and its allies take China lightly, they may one day find themselves walled out of East Asian waterways. That should be cause for concern not only in Washington, but in Canberra.

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NOTES


2. Andrew J. Nathan and Robert S. Ross, The Great Wall and the Empty Fortress: China’s Search for Security, W. W. Norton, New York, 1997, pp. 24–26. It might be argued, reasonably enough, that the Nathan/Ross book is several years old and has been overtaken by unexpected events. However, we took part in an April 2005 conference at the Pell Center for International Relations and Public Policy, Newport, RI, along with Professor Ross. His views about China’s military weakness and overall defensive posture have not changed appreciably since 1997, when The Great Wall and the Empty Fortress appeared.


5. For an account of China’s naval efforts during the Cold War, see John Wilson Lewis and Xue Litai, China’s Strategic Sea Power: The Politics of Force Modernization in the Nuclear Age, Stanford University Press, Stanford, 1994.


10. Mao himself exemplified this openness to Western strategic thought, quoting Carl von Clausewitz, the author of the classic On War, almost as freely as Sun Tzu.

12. Most notably, former Chinese Premier Zhu Rongji accused the United States of dragging out the Taiwan controversy for its own geopolitical ends. Zhu told the National People's Congress, 'It is because there are some people in a certain country who have all along been against China and taken China as its potential enemy, and who want to use Taiwan as an unsinkable aircraft carrier against China; and that is why they want to see the Taiwan question drag on indefinitely'. ‘Chinese Premier Warns Against “Taiwan Independence”’, *People's Daily Online*, March 16, 2000, Federation of American Scientists Website, available at: <http://www.fas.org/news/china/2000/eng20000316N101.htm>. See also Bi Lei, ‘Sending an Additional Aircraft Carrier and Stationing Massive Forces: The US Military’s Adjustment of Its Strategic Disposition in the Asia–Pacific Region’, *People’s Daily Online*, August 24, 2004, FBIS–CPP20040823000025.


23. We use Carl von Clausewitz’s maxim that war’s ‘grammar, indeed, may be its own, but not its logic’ as a device, suggesting that Mahan supplies the logic for a grand strategy of sea power, much as politics gave warfare its own logic, whereas Mao supplies the grammar for Chinese sea power: namely the military strategy and tactics needed to implement a Mahanian grand strategy. Carl von Clausewitz, *On War*, ed., trans. Michael Howard and Peter Paret, Princeton University Press, Princeton, 1976, p. 605.


29. Mahan saw battleships as the embodiment of offensive strategy: ‘the backbone and real power of any navy are the vessels which, by due proportion of defensive and offensive powers, are capable of taking and giving hard knocks’, Mahan, Interest of America in Sea Power, p. 198.


31. The offensive mindset ‘does not mean, however, that when we are already locked in battle with an enemy who enjoys superiority, we revolutionaries should not adopt defensive measures even when we are hard pressed. Only a prize idiot would think in this way’, Mao, ‘Strategy in China’s Revolutionary War’, p. 208.


42. Mahan had in mind the ability of the US Navy to impose command of the sea in the Gulf of Mexico and the Caribbean Sea, astride the approaches to the isthmian canal, despite its overall inferiority
to European navies. His most exhaustive geopolitical analysis of these waters came in two essays: 'The Strategic Features of the Gulf of Mexico and the Caribbean', which appeared in Harper's in 1887, and 'The Isthmus and Sea Power', which appeared in The Atlantic in 1893. Both were reprinted in The Interest of America in Sea Power, cited previously.


44. Keith Crane et al., Modernizing China’s Military: Opportunities and Constraints, RAND, Santa Monica, 2005.


46. Of the Japanese invasion of China, Mao wrote, 'Japan, though strong, does not have enough soldiers. China, though weak, has a vast territory, a large population and plenty of soldiers'. Even if strong enemy forces seized key urban areas and communication nodes, then, China would retain 'a general rear and vital bases from which to carry on the protracted war to final victory'. Mao, 'Problems of Strategy in Guerrilla War', p. 158.


52. China recently supplanted the United States as the largest exporter to Australia. China is also Australia’s second–biggest export market.


60. Such a contribution would not be unprecedented. F/A–18 fighters were deployed to Diego Garcia to conduct combat air patrols in support of the US–led global war on terrorism.

What the ADF Must Do to Hold its Own in the Global War for Talent: A Five-Point Strategy

Nick Jans and Judy Frazer-Jans

Fighting for talent on a global stage

As the Chief of the Defence Force emphasised recently to Defence’s Senior Leadership Group, the ADF’s ‘biggest strategic challenge is recruiting and retaining our people so that we can have an ADF well into the future’.1 The trouble is, with many other employers having a similar need and with a shrinking youth population that regards the world as its oyster, the ADF finds itself engaged in a global war for talent.

The magnitude of the challenge is shown by recent official statistics. Last financial year, the Navy met only 73 per cent of its recruitment target (415 positions short), down from 86 per cent in 2003/04. The Army—which actually needs an extra 3,000-odd troops for its six full-time battalions—was 540 short, meeting 81 per cent of its target, down from 84 per cent. Air Force did best, at 90 per cent of its target (62 short), down from 91 per cent. Overall separation rates have been in double-digits for years, except for a brief period about two years ago. Last year, Air Force again did best, with a separation rate of 8 per cent, with Navy and Army at 12 per cent and 13 per cent respectively.2

Turning this around is going to take more than just fine tuning of existing programs. Moreover, even though there has been a good deal of effort and imagination around the issues of recruitment and retention, especially at the top of the Defence Organisation, the ADF’s record in personnel reform is not encouraging. So many major studies and programs have been launched in great blazes of publicity in recent years—the Glenn Review (1998), The Posting Turbulence Review/Action Plan for People (1999 to 2002), the Officer Professional Effectiveness Review for the Army (1999/2000) and the Nunn Review (2001/2002), just to mention a few—and most sank without much trace. Not surprisingly, many wonder whether the latest review of Australian military recruitment and retention will suffer the same fate.

The ADF can hold its own in the global war for talent, but only if it embraces the need to do different things and to do things differently. The following five-point strategy indicates how this can be done.

Point #1: Revamp career and employment structures

The most fundamental need is to bring ADF career structures into the modern era, and to provide a career management system that treats the human asset with the care that such a substantial and fragile investment demands.3 The ADF’s current employment structure is too complex, too rigid, too sluggish, too stovepiped and too wedded to the notion that experience equals expertise. In effect, the ADF is trying to run an information-age organisation using an industrial-age approach to career development. This is a hindrance to organisational performance and innovation and a real turnoff for prospective recruits and ambitious serving members. As a senior Defence
commentator recently remarked, the Services persist in offering ‘an FJ Holden career in an era when young people want something zippier’.4

The Army’s officer career development model is an example of where and why reform is needed. It was developed for a situation that applied a half-century ago—when the officer corps drew its junior officers from two major sources, Duntroon and Portsea; when the graduates of the latter knew from the start that their chances for continued advancement beyond lieutenant colonel were slim; when middle and senior level staff work was comparatively simple and could be performed largely according to standard procedures; when the amount of public investment in early-career intellectual capital was modest; and when most Australian professional families were of the ‘single-income’ type. None of the above factors now holds but the model continues to be applied almost as if it were holy writ. Because it is essentially an up-or-out approach to career development, those who become ‘non-competitive’ in the middle of their careers (and the shape of the professional pyramid means that this is the majority) have few coherent and purposeful career options beyond that point. Not surprisingly, many contemporary officers find this unacceptable and leave long before they actually face career crunch-time.

Career management is an allied issue. Structural problems such as those noted above make career management difficult under the best of circumstances, but ADF career management is being conducted today in much the same way as it has been for the last four or five decades. At all levels, a comparatively small number of well-intentioned career advisors manage a comparatively large number of highly trained professionals, all in the face of the structural deficiencies discussed above. This is not a good basis for looking after such a valuable asset.

**Point #2: Strengthen the ‘happy ship’ effect**

The ‘happy ship’ effect relates to the intrinsic satisfaction and commitment associated with being a member of a cohesive team, engaged in a worthwhile purpose, making a significant contribution, and led by competent and supportive people. Our survey database of over 7,000 sailors, soldiers, and airmen/women shows that those in ‘happy ships’ are about one-and-a-half times more likely to intend to keep serving for at least another 4 years than those in ‘unhappy ships’.

Unit cohesion and supportive leadership has been a traditional ADF strength but, although this is still generally true, its positive effect has been blunted of late by staffing cut-backs and increases to administrative workload at the unit level (what junior leaders scathingly call ‘corporate governance’). This has created a major distraction for junior leaders, the main effect of which is to reduce the time that they can devote to the function of leadership. Not only is this less satisfying for them but, just as importantly, by eroding the basis of the traditional ‘family’ culture of ADF unit life, it makes unit life less satisfying for those whom they lead.

**Point #3: Strengthen the ‘human touch’ in the first and last experiences of Service life**

It cannot be stressed too strongly that ‘first impressions count’ in career commitment. Induction and training must make the new entrant feel respected and welcomed as well as challenged, and
thus embed the impression of being part of a reliable, caring and efficient employment system. And their first reports of how they are being treated are important to their immediate families and ‘significant others’ who, in turn, pass the news—either good or bad—on to others. All of this is part of the informal communication flow that determines the ADF’s public reputation and its prospects of acquiring further recruits.

At the other end of the career experience, the old axiom that ‘the best recruiting sergeant is a satisfied ex-soldier’ holds true even more keenly today. Ex-members return to the community to tell the story of their experience, and again the ADF’s reputation depends in part on whether this story is favourable or bleak. While it is inevitable that some members will leave because of career dissatisfaction, at the least the ADF must manage the exit/transition process so that ex-members’ last impressions are favourable. Moreover, it makes much sense to adopt the principle of ‘open arms, long tentacles’, and retain ex-members within the ex-military diaspora for as long as possible.5

**Point #4: Focus on the true needs of families**

‘Recruit the member, retain the family’ is a US military slogan that is just as valid on this side of the Pacific. Our modelling of retention incentives demonstrates that improved family support—in the form of greater locational stability, more assistance for partner employment, and improved child care—would lead to higher retention.

Responding to these challenges will demand much more than simply providing beefed-up Defence Community Organisation or Defence Housing Authority services, higher allowances, or any other simplistic single-factor initiative. In many ways, in fact, the family support issue leads us back to the first of our initiatives—career restructuring—and how inflexible and overly-complex employment practices, applied across a large number of locations, in conditions of high operational tempo, will affect contemporary family life. (This is another reason why employment structure reform must be the priority for action.)

**Point #5: Make the Service Chiefs directly accountable for driving personnel reforms**

All the above issues have been known for years, and the ADF knew 20 years ago that the demographic ‘train smash’ was coming. But, as a colleague despairingly observed to us recently, ‘they always seem to wait until a personnel problem becomes a crisis before doing what’s necessary to fix it’. So part of any program aimed at improving personnel outcomes must consider how it would be led—and above all managed—differently so that this time there can be genuine progress.

There are two major reasons for the ADF’s sluggish past performance in personnel reform. First, accountability for personnel outcomes is diffused throughout the institution. The major players are the large and complex Defence Personnel Executive and the three Service personnel branches, but beyond that a myriad of personnel offices operates in every major headquarters. Second, such is the rate of mid- and senior-level job rotation within these elements that the cast is always changing and always learning.
In such a situation, initiatives such as those proposed here thus tend to be seen as being ‘too hard’, because they require a sustained and coordinated effort (i.e. longer than a posting cycle), and are likely to encounter nasty cultural and political side-effects. For the individual, there are many career risks and little kudos associated with personnel reform (in contrast to something more professionally mainstream, such as introducing new capabilities). Alas, this often results in an attitude of ‘good idea—but not on my watch’. Not surprisingly, personnel reforms often bog down or peter out after a single posting cycle.6

Therefore the fifth, and perhaps the most important, part of our strategy would be to make the Service Chiefs directly accountable for leading the charge. They are the ‘Tribal Chiefs’ of the military institution and, as such, they control the major rewards of promotions and postings. Only they have the institutional influence and the cultural clout to drive reform at the crucial middle levels where it often falters, and to ensure that organisational arrangements are in place to make it happen.

Not only must the Services do different things to win the global war for talent, they must do things differently. The era in which personnel management could be done by any officer after a day or so of handover–takeover is long gone. Not all personnel managers need appropriate professional skills and career development, but each Service needs at least a critical mass of such officers to provide leadership within the reform process, and continuity of thought and action by officers who are there for the duration.

In this respect, inter-Service snobbery should not prevent Navy and Army leaders from taking serious note of how personnel reform has been carried out in the RAAF. One of the reasons for its recent superior performance in recruitment and retention is that, for the best part of the last decade, Air Force senior leadership has taken a serious interest in the performance of its personnel system. This has helped to ensure that many of Air Force’s personnel management priorities have been translated into action (e.g. with programs such as the Pilot, Engineer and Logistics Sustainability Projects). Perhaps most importantly, the Air Force has ensured an appropriate consistency of leadership and skill within the personnel function. Recent DGPERS-AF incumbents and their direct reports have usually had previous experience in the personnel function. In contrast, Navy’s personnel functions have been headed by four different DG-level officers in the last six years and, in Army’s case, six in six years.7

Conclusion

ADF leaders are fond of stressing that ‘people are our most important resource’, and it is true that concern for people is a genuine and deeply-rooted ADF leadership value. But the rank and file are tired of the rhetoric in the absence of genuine reform that addresses their career needs.

As a coherent program, our five-point plan for winning the global war for talent goes to the heart of the major causes for recruitment and retention problems, and is certain to be perceived by its professional constituency as evidence that their leaders are serious about the issue.

With application and imagination, the traditional ADF leadership value of ‘concern for people’ could be turned to its advantage, as one of the main features by which the ADF distinguishes
itself from alternative employers. It can be an ‘employer of choice’ if it bolsters and plays to its strengths, and if it is prepared to be more flexible and proactive in its thinking.

How the ADF responds to this challenge will be a major test of its corporate capability and its much-touted ‘leadership culture’. The major issue is not so much whether the ADF has the skill to make all this happen, but whether it has the will to acquire the skill and the organisation (especially at the strategic level) needed to drive true personnel reform.

A long series of major internal and external reviews into personnel problems over the last 30 years means that the ADF already knows, in essence, what the issues and options are. It’s had many opportunities to act strategically but has drawn back each time. Further procrastination will simply make it worse for the next generation of leaders. On whose watch will real personnel reform dare begin?

The authors are the principals of Sigma Consultancy. They have had a long association with the military institution, both in uniform and as civilians. In particular, in the last four years they have conducted focus groups and surveys within 50-odd officer and technical/professional streams from Seaman Officer to Aircraft Technician, and have developed a number of Human Resource Decision Support System (HR DSS) models, for the identification and evaluation of retention strategies for each of the professional streams involved. They welcome discussion on this: please contact them at info@sigmaconsultancy.com.

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NOTES

1. CDF opening address to the Senior Leadership Group recall day, 20th of February, 2006.


4. Dr Hugh White, quoted in Jo Chandler, 'Answering the call', The Age, 22 April, 2006.


7. For senior officer job rotation rates, compared with those of corporate Australia, see Nick Jans with Jane Harte, Once Were Warriors? Leadership, culture and organisational change in the Australian Defence Organisation, Centre for Defence Leadership Studies, Australian Defence College, December 2003.
Professional Military Education in Australia: Has it All Gone Terribly Right?

Dr David Cox and Dr Andrew O’Neil

Abstract

In this article we discuss the contemporary challenges facing the delivery of Professional Military Education (PME) in Australia. Rather than criticising the current state of PME, we believe it is more productive to explore how positive outcomes can be secured within the constraints facing decision-makers over the next five to ten years. PME should, we argue, be regarded as an umbrella term that incorporates a much broader set of defence and security related educational processes and outcomes.

Chief of the Defence Force (CDF), Air Chief Marshal Angus Houston, recently announced a review into Joint Education and Training. Our intention is to discuss PME issues within the context of the historical development of Defence’s key PME provider in Australia—the Australian Defence College—and in so doing offer some points relevant to CDF’s review.

Introduction

This article has three primary objectives. First, it seeks to present an account of the state of Australian PME. We think that it is important that our colleagues in the wider Defence and academic community understand what PME is ‘on the ground’. The second task is to encourage a debate between interested parties with a stake in PME—nationally and internationally. To that end, the third aim of this article is to sketch out some modest proposals as we develop the argument. These we believe could be useful for CDF’s Joint Education and Training review to be carried out by the Commander of the Australian Defence College. Our analysis is based on three core assumptions. The first is that PME is critical to the sustainability of Defence as an institution. Second, PME is central to recruitment and retention issues. And third, PME is the ace in the capability deck. Before we begin the discussion it is worth establishing the current health of PME in Australia.

What the academics say

Attempts to provoke a public discussion on PME issues are evident in the recent writings of two academics whose long association with PME in Australia and overseas mean that their views need to be considered. Interestingly, both arrive at a similar conclusion even though they come at the issue from very different positions. Jeffrey Grey argues that:

Midway through the first decade of the 21st century, the officer PME system in Australia is in profound disarray, and is fundamentally failing the organisation of which it should be the intellectual gatekeeper and guiding beacon.1

Grey develops his concerns in the following manner. The PME system, he says, lacks continuity and alignment with ‘no central coherent philosophy that unifies the whole’.2 The push to
outsource ADF education, Grey argues, has resulted in ‘credentialism’ and in some cases the
‘accredited degree qualification is a joke’.3

Ross Babbage strikes a similar note of alarm. He claims that:

   The Defence officer education system currently fails to achieve the high levels of excellence
   required. It also lacks flexibility and adaptability, and it does a very modest job of inculcating
   such key characteristics in those sent to participate in the courses.4

Grey states it explicitly and Babbage notes it implicitly: this ‘failure’ damages the warfighting
capacity of the ADF.5 This is a serious claim to make. Yet finding a point where an assessment of
these claims can be made fails as neither author offers evidence to substantiate their assertion.
If this ‘failure’ is so acute as to require no evidence then why is it that success seems to dog
Australian forces on operations where the weaknesses perceived by Grey and Babbage ought
to be fully exposed? Assuming that Babbage and Grey believe that problems with PME will
impact adversely on future ADF operations, they need to specify how, exactly, this might come
to pass. Unfortunately, it is not clear from their writings where they think the weaknesses
they identify will become manifest in future operations.

PME: Military success from defeat

The idea that educating the officer corps of armed forces can contribute directly to improving
their leadership qualities (and thus the effectiveness of the armed forces as a whole) can be
traced to a series of devastating defeats inflicted on Prussia by Napoleon in the early 19th
century. Following the decisive French victory at Jena-Auerstadt in 1806, the Prussian high
command responded by introducing a program to educate a small cadre of officers on the broad
theoretical and practical parameters of war. This was an era when the intellectual mastery of
war as a science was seen not only as a desirable, but indeed necessary, means of attaining
victory in combat.6 Few would argue against the proposition that a well-educated military is
the best capability a state can have as it looks to prosecute warfare.

Battlefield defeat certainly crystallises the need for PME reform. The American experience is
illustrative. After Vietnam the US military went through a restructure and expansion of its PME
programs. But particularly critical was the attention given to PME by Congress culminating in
the Goldwater-Nichols Act of 1986. Some US politicians have since come to see their role as
‘champions’ of PME.7 Within the military, direct responsibility through to the highest levels in
the chain of command were given reporting duties on PME. It is interesting to note the degree
to which there is a keen political engagement and understanding of the importance of PME at
the strategic level within the US system.8 Eliot Cohen suggests that the US military will once
again embark on another round of questioning its PME structures due to its involvement in
Iraq.9 PME in Australia does have its problems but unlike our major allies it would not appear
to be facing a crisis.

Sorting out those problems is an ongoing process within the individual PME institutions.
What is now needed is a strategic level analysis of how those various institutions function
to support an educative continuum of PME. The CDF recently announced a Joint Education
and Training review to be headed up by the Commander of the Australian Defence College (COMADC), Major General David Morrison. As COMADC, Morrison is well positioned to carry out the review. A graduate of the Centre for Defence and Strategic Studies (CDSS) at the ADC in 2002, Morrison’s command experience will bring insight into how effectively officers are prepared by the current PME structures.

The Australian Defence College

It is pertinent at this point to outline how and why the ADC was established and what its various proponents believed its role should be. Major General Peter Day has observed that the process by which the ADC evolved was attenuated with strands of the debate dating back as far as 1959. However, by the 1980s the momentum for change was palpable. The Butler Report of 1984 argued that officer education beyond that provided by the Joint Services Staff College (JSSC) was required. Major General Butler argued for a 12-month course that would ‘prepare officers for high command’. The course would ideally cater for 35 course members. With 25 of those course members being drawn from the Department of Defence and the Services, the balance would come from other Federal and State departments along with five from overseas and some from private enterprise. The creation of the National Defence College would also have a strategic research element to support the teaching programs.

The Butler report and later the Hammett report made it clear that the lack of an indigenous National Defence College was a deficiency in Australian officer education. In 1986 Professor Harry Gelber—in conjunction with the Hammett review process—established a clear rationale for the creation of a national college:

What is needed is an Australian solution to special Australian problems. Given the official emphasis on Australian independence, it is right to ask whether, by its failure to establish its own national defence courses, Australia can continue to remain out of step with, and dependent on, her major allies and friendly nations in this area?

Gelber went on to offer some critical insights that remain as fresh today as they did in the mid-1980s. Key to his recommendations were ‘high-quality staff’ and a ‘carefully developed curriculum’ that would ‘give the new institution professional and academic credibility’. He expanded these themes in the report and they remain relevant two decades later.

Unlike Gelber and the series of prior reviews and reports, in 1989 Cathy Downes articulated the purpose of officer education in the concluding remarks to her exhaustive study: Senior Officer Professional Development in the Australian Defence Force: Constant Study to Prepare. Downes claimed:

The senior officer corps is a sine qua non in the effort to modernise the Australian Defence Forces, to produce effective war-fighting capabilities and doctrines, and to develop responsive military and defence strategies for the future. The influence of this corps of officers extends further into the future and is of broader consequence than any single weapon system or platform...
Pulling these threads together into a coherent ‘blueprint’ for action fell to Brigadier Adrian D’Hagé. In his 1991 report to then CDF General Peter Gration, D’Hagé distilled the overseas experience in senior officer training and arrived at an ‘Australian model’ for a National Defence College.15

Our interpretation of this history of the development of the ADC suggests that many of the issues that need resolving today were canvassed and discussed in the various reports leading up to the creation of the ADC. Because the focus of that process was to create a functioning PME system quickly, a raft of issues that could not be resolved then understandably fell by the wayside. We argue that the current PME review is timely in that it has sufficient intellectual space to reflect on where improvements can be made without the rush to create a new PME system. One area that warrants exploration is whether the right type of staff and the balance between military and civilian involvement in PME meets requirements.

Unlike its overseas equivalents—which have faculties of academic, military, and public service members, of whom some are permanent—the ADC has no permanent faculty as such. The co-located colleges of the ADC have military and public service directing staff. The directing staff are rotated out every two years for military officers and every three years for public servants.16 A permanent staff of academics and/or military officers, it could be argued create a less flexible environment. There are counter arguments that continuity suffers as a consequence of staff turnover at the directing staff level. However, continuity should reside in systems not individuals. If there is a serious continuity problem the ADC has yet to suffer from it. Of course, new perspectives and different ways of doing business need to be grounded by past experience, but established means of transmitting knowledge from one rotation to the next should be a particular strength of this military environment. Nevertheless, churn at the top of the organisation is a serious matter.

Since the ADC was established no Commander has seen out the full-term of his posting. Rear Admiral Gates was dual-hatted as COMADC and Chair of the SIEV-X review. Before Major General Molan left the ADC to take up the position of Deputy Chief of Staff, Strategic Operations, Multi-national Force in Iraq, he undertook a range of other duties. Rear Admiral Bonser, like Gates, was dual-hatted undertaking the review into military justice. Since 2002 there have been four Commanders of the ADC. Within the last three years at the Centre for Defence and Strategic Studies Centre (CDSS) there have been as many Principals. The Australian Command and Staff College (ACSC) has also experienced significant turnover at the senior levels. Whether that rate of change undermines the institutional strength of the ADC is worth further investigation in the PME review.

**In the schoolhouses now**17

Anyone involved in the design and delivery of educational product—particularly in the military context—appreciates that it is a complicated business hammered out on the anvil of compromise. Pressure to include everything that is thought to be important can result in courses being ‘an inch deep and a mile wide’.18 Striking an appropriate balance between specific single Service requirements, joint aspects, broader strategic studies, and leadership and management is a difficult task.
The ADC has recently undergone major change in the way it conducts its courses. In 2006 both the ACSC and CDSS implemented new curricula after several years of assessment and review. With the emphasis on warfighting the curricula have been restructured in line with the ‘Commander’s Intent’ laid down by former COMADC Major General Jim Molan and agreed to by the Chiefs of Service Committee (COSC) in 2004. It is still early days and there will no doubt be areas that need refining. Yet there is a strong sense that both colleges now have courses that better meet Defence requirements. It is also fair to say that the ADC has made significant progress towards becoming a smart(er) customer of academic services. It is now able to identify providers who understand the Defence ‘practitioner-oriented’ requirement.

A curriculum is only as good as the institutional integrity that supports it. There are a number of areas where organisational improvements to the ADC and across the range of PME institutions would produce better results. Some simple internal restructuring to squeeze out synergies, reduce duplication, streamline the support programs and continually check the ‘learning continuum’ would yield stronger dividends. While the ADC is a relatively young organisation it shows signs of moving quickly in the right direction. Building an ADC ‘culture’ by recognising the strengths of its constituent elements to produce a tighter alignment is one bigger issue certainly worth exploring.

The challenge in the near to medium term will be to maintain Australia’s established reputation as a leader in delivering high quality PME outcomes. This is going to be difficult in an environment where the ADF will be assigned additional operational commitments by government. Members of the ADF—as well as Defence civilians—who are best qualified for professional development via a sustained PME program, are also likely to be the strongest candidates for extended deployment or placement directly related to the military’s higher tempo operational commitments. The higher the operational tempo, the more likely the small number of recent graduates of PME programs—who remain among the best qualified to teach and mentor new course members within these programs—will be assigned to operational command, staff, and senior leadership appointments within Defence. That trend, far from being assisted by new developments, will become even more compressed. As Murray Simons claims, ‘smaller personnel numbers will make it harder for units to sustain long absences to PME courses’. If Simons is right, then the major impact will be that fewer personnel for shorter periods of time will be available at any given time for PME.

PME is critical to operational success but just as important, operational experience is essential to developing a strong PME. What we advocate is a more deliberate approach to having officers with recent operational experience brought back to the ADC to teach and mentor even if for a short period of time. To some degree this does happen at ACSC but less so in other areas. A more coordinated approach across all the Services in consultation with the ADC and career management would produce better results. Moreover, it is also critical that the ‘lessons learned’ from operational experience be fed back into curriculum development. These twin processes if systematised would ensure an effective and efficient cycle of continuous improvement.

Twelve-month courses that allow intellectual reflection and development should always exist. But the rigidity of march-in January and march-out December courses with full-time face to face attendance may no longer be feasible or even desirable. That method might be administratively easy but is it what Defence needs? Perhaps a more flexible and modularised ‘plug and play’
model would be more effective. The yawning gap in the ADF PME is the absence of ‘islands of education’ between ACSC and CDSS. The development and level of responsibility between MAj(E) and COL(E) is significant and there is a clear requirement to provide specific educational product to support officers in that phase of their careers at the LTCOL(E) level.

The increased operational tempo and the demand to staff a new Defence establishment at Bungendore will put great strain on personnel availability. The critical questions for PME are: Is the current educational program what the emerging officer corps wants? Can we recruit and retain officers by offering them a traditional form of educational experience? Given the somewhat transient and erratic nature of career and deployment, Defence needs an officer education system that supports what James Schneider calls the ‘expert learner’ concept.23 As Brigadier General Thomas Phillips notes, ‘The simplest test of whether the Army officer is a true professional is in the evidence of his professional study’.24 This reminds us that the officer should look for learning opportunities as much as Defence should provide them.

Generational change now upon us signals that those entering Defence are looking for a different pattern of work experience where mentoring, leadership, and opportunity for responsibility are uppermost—they are a different kind of raw material. A watershed event passed largely unnoticed when the first officer to graduate from ADFA (1989) graduated from CDSS (2005). This significant event should make us alive to an emerging trend. For the last five years at ACSC there have been officers who enter with solid academic credentials from ADFA and elsewhere.25 Retaining these officers is best achieved by giving them a challenging curriculum that is tightly focused on developing a professional body of knowledge and preparing them for the posting after next rather than another academic qualification.26 Providing these officers with a problem solving skill set to adapt to different environments will mean that Defence will have a more flexible personnel base and the officers will have higher levels of job satisfaction. The on-going debate within the intelligence community over methodological approaches to analysis and problem solving is directly relevant to recasting PME.27

In the wake of 9/11 considerable effort has been devoted to rethinking intelligence models. What emerges from that process is the general proposition that some systems and models of analysis are inflexible and simply incapable of finding nuance. So often things that ultimately turn out to be critical tend to happen in the margins—passing by unnoticed. Striking the balance between detail and theme or the particulars and the model requires fine judgement. As we move from the tactical to the strategic, the demand for a capacity to think through a problem becomes vital. Problem solving operates at a number of levels and arguably in the modern security context the tactical, operational, and strategic levels have become so blurred as to render them almost irrelevant. Defence education should therefore seek to develop complex problem solving skills across all levels—officers, NCOs, and civilians.28

Not what to think but how to think

In the ‘Commander’s Foreword’, to the ADC’s Strategic Plan 2005–2015, former COMADC Rear Admiral Mark Bonser claimed that:
Tomorrow’s practitioner must have the capacity to synthesise diverse information, use their intellectual agility to determine relationships between variables, and then to apply this to higher order problem solving.\textsuperscript{29}

Bonser sought to use the backdrop of ‘strategic ambiguity’ to suggest that the study of theory, history and contemporary events, while important, was not sufficient. He argued that the ‘how and what taught previously needs to be reconsidered’ as does program delivery. This new context means that ‘Traditional methods of teaching sit uneasily with this new set of demands’. Nowhere in this document is mention made of PME. Although undeveloped, this line of thinking suggests that for Bonser there existed a degree of frustration that the PME nomenclature did not accurately capture the opportunities and constraints Defence educators now face. We sense that Bonser’s concern was about developing an educational framework that could evade the crude trifurcation of tactical, operational, and strategic levels of analysis. If correct, then we see merit in a PME system that would explore these issues and possibly recast the approach to teaching that may have extremely positive effects for mid-ranking officer retention where it can be utilised in ways that produce a transformative shift in course member thinking.

The new and not so new

Operational tempo and the types of operations the ADF are now grappling with present particular challenges for PME. Here we do not want to use those hackneyed phrases such as ‘in the post–Cold War environment’ or the ‘arc of instability’ or ‘failed states’, even though they retain a degree of currency for describing systemic change. Let’s just recognise that the circumstances and situations in which ADF personnel now find themselves are different from what once could be anticipated. The demands—especially those surrounding the potential political costs—are now far higher. Make no mistake, operational success by an individual or the ADF at large rests on PME foundations—it is a major capability asset. Call it what you will, this ‘new’ context requires a highly professional outfit from top to bottom.

In this ‘new’ environment doctrine will remain critical. But there is sometimes a need to move beyond doctrine. That demands a capacity to comprehend the intent of government policy and interpret that within a fast moving military environment with an increasingly ‘embedded’ media close at hand. That this requirement might unfold in a coalition, multinational, or inter-agency operation where peacekeeping, peacemaking or warlike conditions may all exist simultaneously alerts us to the need to educate in particular ways. Defence needs to get more of its personnel through the PME system in quick time. We have the appropriate structures in the current schoolhouses to achieve this but some redefinition of how they function is warranted.

Leadership and ethics should form the core of PME. Individual and collective leadership is something that Defence has always expected from its personnel. The organisation spends considerable time and effort inculcating leadership values. George Reed and his co-authors provide a timely reminder of the centrality of leadership when they claim:

Leaders should be values champions for organizations and must be attuned to issues of climate and culture. We also need leaders who can communicate effectively to a wide range of audiences.
They need to inspire soldiers and also be able to address the American public and the international community through the unblinking eye of the television camera.30

As we use the term here, ‘ethics’ is not solely an appreciation of the laws of war. For a truly professional military, ethics incorporate a fundamental set of guiding principles that go beyond the laws of war and international legal obligations. These principles provide an enduring moral compass that supports complex problem solving and effective decision-making that underpins operational success.

**Confidence in our own capacity**

There are, as one would expect, a number of ‘institutional’ difficulties in the world of PME. Some of these stem from the single Service approach of the past and the evolutionary integration into an ADF from the mid-1980s. Combining the Service Staff Colleges into the Australian Command and Staff College only happened in 2001. While that process was building, the wrecking ball of short-term reform had all but demolished anything that resembled Joint Education and Training within Defence. Subsets remain today but function under great strain. In some cases they are burdened by managing the competing expectations and interests of users and providers. Possibly the major difficulty is that policy development remains separate from the delivery arm of PME.

How the myriad elements of Defence education fit together is often difficult to comprehend. Individual units excel but there is little integration and, despite best efforts, the continuum is often more happenstance than planned. The ‘closed-shop’ nature of some of these elements is a real barrier to taking best practice elsewhere and adapting it. As understandable as it is to want to protect what one has developed it is myopic to think that others may not have something to offer. Yet these criticisms still miss the bigger point. Without a broad strategic framework that articulates the educational requirements coherently, elements will continue to operate in ways they have done in the past. The current PME review should therefore examine very closely the need to bring the policymaking areas of PME into closer alignment with the development and delivery elements. These matters can be resolved through an organisational restructure and by making sure that those who are appointed to oversee the change remain in place to complete the task.

As the ADC model was being developed in the latter part of the 1990s these sorts of concerns were recognised. The former Head of Joint Education and Training, Rear Admiral John Lord, assured that the creation of the ADC would go a long way to providing the much needed organising principles and institutional framework for PME.31 It is worth quoting at length from his 1998 comments:

…the minimum critical specifications for a successful ADC would be for it to have the capacity to coordinate the customisation and delivery of education and training services to a diverse range of Defence constituencies. It would do this in ways that both maximise learning effectiveness and administrative efficiency. …We see the ADC in a mediating relationship between Defence as a consumer of education services and the higher education system as a provider. …The creation of a peak or premier coordinating institution such as the ADC will place current institutions within
a policy and institutional framework designed to support the Defence education continuum as a whole. It thus creates the conditions for an ongoing critical examination of how different elements of the continuum … best contribute to the education outcomes served by the college…

The idea of creating an educational ‘clearing house’ for Defence was sound. Between the time these comments were made and the commencement of the ADC, the drive for cost efficiencies and the dire need to get ACSC established on schedule, restructure JSSC, and fix the curriculum problems of the forerunner to CDSS, these strategic issues gave way to more tactical concerns. The staffing levels needed to achieve the sort of institutional support deemed necessary from the mid-1980s onwards were never realised. Although we cannot provide a detailed explanation of why this happened because it is another large research piece on its own we can at least provide a useful context to begin framing an answer.

The Defence Efficiency Review

In the late 1990s Defence education and training became part of a wider drive for rationalisation and cost efficiencies of a new government. Defence Minister Ian McLachlan launched a wide ranging review into Defence and how it could do its business better. The ‘Defence Efficiency Review’ found in relation to Defence education:

We believe that there are substantial benefits to be obtained by managing officer education as a single process, and for there to be a greater emphasis on joint officer education. We have been unable in the time available to make specific proposals, but believe the potential for savings and a better product is substantial.

The authors of the review went on to argue that they were ‘reluctant to create a Joint Training Command or an Executive’, and argued that Commandant ADFA in consultation with the Rector should have responsibility to develop and implement policy.

With the ‘strategic’ framework set, a sub-Review Team structure was created to drill down into each of the issue areas identified by the Senior Review Panel. The relevant (and for our purposes more interesting) material is therefore to be found in the ‘Addendum to the Report of the Defence Efficiency Review: Secretariat Papers’. Throughout the discussion on education and training the term ‘Joint’ appeared to become synonymous with efficiency:

In the short to medium term, the rationalisation of schools and facilities along joint Service lines would achieve efficiencies through reducing running and support costs and management overheads, freeing funds tied up in facilities and assets, releasing delivery staff for operational tasking, and creating conditions for further management improvement through adoption of standard processes, rationalisation of curriculum and market testing.

However, at the higher levels of Defence education the review presented some critical insights around the idea of amalgamating JSSC and the Australian College for Defence and Strategic Studies (ACDSS). Efficiency alone, they said, would not be the ‘principal driver’ for the restructuring of JSSC and ACDSS. As is often the case the interesting discussion took place in the margins. The panel certainly recommended that one senior officer college be established
but that there was merit in this college delivering a ‘flexible range of educational services’ with ‘more focused courses’ through a ‘series of interventions spread over a longer period in an officer’s career’.  

It would be easy to suggest that the rush to extract efficiencies from the Defence system created many of the problems we have discussed. But what is very clear is that the review process was anything but a crude cost-cutting exercise when it came to senior officer education. We claim that in the current context some of the observations made in the past about the type and form of PME curriculum required remain highly relevant. Why that did not transpire probably had to do with institutional politics within Defence more than government directive. The point we want to reinforce, and suggest the PME review consider seriously, is the development of flexible packages of educational product with a sharper focus on relevant and supportive programs of study that officers can access at the appropriate time in their careers.

A PME fit for the practitioner

PME in Australia must be based on a coherent and flexible continuum that takes personnel through a series of educational experiences that develop into a professional body of knowledge of warfighting. Ordering that continuum as tactical, operational, and strategic is no longer useful. A more flexible process would see all three elements and then combinations of them taught up and down the PME hierarchy. Sectors of the public higher education system have a role to play. But Defence really does need to set the agenda and map out the key learning outcomes that will enable ADF personnel to do the tasking demanded. That requires high level coordination and an overarching authority to guide it with an appointment at a senior level with direct access and responsibility to CDF—COMADC would appear to be the logical choice. There would be merit in establishing around that position a small team with specialist expertise able to help formulate education policy and oversee delivery. More importantly, that group would be used to measure effect.

‘The future’, as the French poet Paul Valéry wryly noted, ‘is not what it once was’. And yet it is all too easy to exaggerate the degree of change internationally. It is worth pointing out that the international system itself and the way it functions, remains largely unchanged since the Cold War. States remain the highest sovereign authority in international relations, material ‘hard power’ capabilities still trump normative ‘soft power’ capabilities in international relations, and the ‘threat spectrum’ for states is no more dangerous now than it was during the Cold War. The workings of nation building and state making are just as problematic, and for Australia these twin processes are readily identifiable in many of our struggling neighbours.

By overlooking the lessons of history we run the risk of misunderstanding contemporary world dynamics. By reifying ‘critical’ thinking over strategic thinking we run the additional risk that insufficient attention is devoted to long-term strategic change, by any measure a core intellectual business of Defence. None of this is to deride critical thinking skills, but two points need to be made. First, critical thinking is not strategic thinking. And it is the latter more than the former that Defence really needs. What we expect of senior officers is a capacity to synthesise large and complex slabs of information and distil it into sound assessments on which policy can be
formulated. Second, the essence of an effective military rests on a solid base of leadership and ethics. Both strategic thinking and, leadership and ethics are generic skills required across Defence. While not advocating specific courses on these topics alone we argue for a more integrated approach. Drawing on recent experience illustrates the point we seek to make.

At ACSC this year Commandant Brigadier Wayne Bowen’s staff have structured the curriculum so that there is an opportunity for course members to undertake a five-week research project. Course members in consultation with key Directing Staff select a research topic and a mentor is appointed. At the end of the period each course member has to present the findings of the research. With senior officers and topic specialists present the course members give a 30-minute presentation and then are subject to intense questioning. The focus of the questioning is not as would be expected in an academic setting—i.e. the merits or otherwise of a set of arguments—but in every case: How did this research help prepare you for leadership? Put simply, in this context the ‘academic content’ was used as a vehicle to gauge professional development. And that is why PME is so different from public higher education in the broad. The expectations of leadership we have are so much higher because the costs of failure are so much greater. The take home message is that content is important but how it is arranged and how it is used to achieve Defence-specific learning outcomes lies at the heart of PME.

Defence educates and trains for many purposes but the prime reason is to enhance warfighting. PME in that context must centre the ADF ‘student’ as a receiver of a professional body of knowledge. Effective PME is about imparting that professional body of knowledge efficiently and bringing to that a capacity to engage in ways that utilise scholarly assets—research, application of logic, and a disputatious attitude. A decade ago William Wallace drew attention to the distinction between scholarship and scholasticism when he noted:

Scholarship necessarily involves conceptualization, categorization, and explanation, and assumes transmission of the knowledge gained to others. Scholarship hardens into ideology or dogma when the contingent basis for explanation—the necessary doubt which should accompany all intellectual discovery—is forgotten. It deteriorates into scholasticism when its practitioners shift from attempts to address common questions from different perspectives to competition among different ‘schools’; in which each multiplies definitions and explanations, develops its own deliberately obscure terminology of competing groups. …[scholasticism] developed out of the overpreoccupation of medieval university teachers with disputes with each other rather than with an engagement with the problems of the world beyond their monastic or university walls.

Defence needs a PME that promotes scholarship and eschews scholasticism; the touchstone of PME has to be a strong practitioner focus served by a relevant and engaging curriculum that prepares all of its graduates to meet the challenges of warfighting in these tangled times. Leadership and ethics should form the core of PME supported and informed by a practitioner focused professional body of knowledge.

Conclusion

The operational tempo for the Australian Defence Force (ADF) has increased dramatically since 9/11, with major commitments in Afghanistan, Iraq, Solomon Islands and, most
recently, East Timor. As a consequence, there has been a more intensive mining of the ADF’s senior officer ranks to fill combat related leadership roles to service expanding operational commitments. The imperative of more frequent rotations for those involved in combat deployments has also accentuated the need for ‘talent mining’ in the ADF. As a medium sized armed force, this has inevitably placed strains on the capacity of the ADF to ensure continuity and stability in senior ranked appointments across Defence. This pressure, in all likelihood, will only increase in coming years especially if Australia is called upon to support operations in the Middle East and Asia while it continues to ‘backfill’ existing commitments in Iraq and Afghanistan. At the same time, expanding Australian-led commitments in Solomon Islands, and East Timor may be followed by other operational deployments in the South Pacific.

In this demanding context, PME will become more, rather than less, important for Australia. ADF peace enforcement type operations in Iraq, Solomon Islands, and East Timor have all required close cooperation with the local population and an appreciation of the highly fluid political climate framing Australia’s respective military contributions. In many respects, these types of theatres are much more challenging for the ADF than state-on-state conflicts. The reality is that ADF deployments since the end of the Cold War (with the notable exceptions of Gulf Wars I and II) have largely been tasked to deal with conflict within states where senior personnel are required to cover an array of difficult missions in addition to warfighting. These include: brokering negotiations between local parties, providing force protection for state building, and supporting local forces against ethnically/religious based militants. These are not merely ‘operational’ level tasks. They are operational tasks with extraordinarily sensitive strategic implications. Without a firm foundation in PME, ADF and Defence leaders may struggle to ensure that the future implications are positive for Australia.

The ADC may not be perfect, and there are many issues yet to be resolved, but it does provide the intellectual and institutional framework for officer PME in Australia. That is a far cry from where things stood less than a decade ago. In any case it is what we have and thus what we have to work with. Improving the PME system in Australia as we have argued will require some changes to the institutional structures as well as to the curricula. The integrity of the schoolhouses is critical and they must be staffed with people best suited and qualified to do the task. A more systematised approach to bringing personnel with recent operational experience to instruct and mentor would prove beneficial. Feeding in the ‘lessons learned’ from operations to the curricula is vital if Australia is to build a durable PME. These institutional changes should support and reinforce the best curricula that can be developed.

Adopting a rigorous process to make sure that the education continuum is coherent and meets the needs of current and prospective personnel sounds easy but it will take time and research. Developing problem solving skills at the strategic level across the whole of Defence and making leadership and ethics the core of PME will help focus our efforts. And as we have argued there are opportunities to modularise and make flexible the various entry points into the schoolhouses by exploring the ‘expert learner’ concept. This could be a useful starting point, as it will drive us to think, who are we educating and how that is best done.

We would like to express our gratitude to those colleagues who have provided ideas, suggestions and comments on the various drafts of this article. All opinions and errors are exclusively ours.
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NOTES

2. ibid., p. 27.
3. ibid., p. 28. Such observations on accreditation, we note, are not peculiar to the PME system in Australia alone. The registrar at Canada’s Royal Military College recently remarked, ‘it is unfortunate that officers are advised to obtain a degree, rather than an education’. See Lieutenant-Colonel David Last, ‘Military Degrees: How High is the Bar and Where’s the Beef’, Canadian Military Journal, 5(2), 2004, p. 29. While space prohibits a deeper discussion of this matter it is useful to note that a distinction between ‘hunters’ (military career-orientated) and ‘collectors’ (those who exit at mid-rank with as many qualifications as possible) is one that warrants far more study in the PME debate. Murray Simons pointed this out several years ago in a very engaging discussion about PME issues. See note 21 for detail.
5. Grey, ‘Professional military education and the ADF’, p. 27. See also the discussion of Ross Babbage’s claims by Patrick Walters, ‘No place for timid in urgent reforms’, Australian, 10 October 2005.
7. Affectionately known as the ‘Godfather’ of PME, Ike Skelton is a case in point. In 2004 he was the Ranking Minority Member on the Committee on Armed Services.
8. Note the contrast with Australia. For an Australian perspective it is worth reading the recommendations offered up in the Joint Standing Committee on Foreign Affairs, Defence and Trade, Officer Education: The Military After Next, AGPS, Canberra, 1995.
13. ibid., p. 22.

17. We take this term from Admiral Shulford of the US Navy. We are attracted to his argument that ‘the schoolhouses are the lynchpins of organisational and cultural change’, see his ‘President’s Forum’, *Naval War College Review*, 59(1), p. 12.


19. ACSC and CDSS are co-located at Weston ACT. The third element of the Australian Defence College is the Australian Defence Force Academy (ADFA).

20. Molan’s role in reshaping the curricula should not be understated.

21. The Canadians, it would appear, have created a highly productive relationship between the Canadian Forces College (CFC) and their Royal Military College (RMC) in ways that could be germane. See Murray Simons, *Professional Military Learning: Next generation PME in the New Zealand Defence Force*, Air Power Development Centre, Canberra, 2005, p. 29.

22. ibid., p. 5.


25. Prior to 2006 ACSC course members could undertake an additional course of studies to the psc(j) to achieve a Masters in Management Studies during their year of study. Directing Staff report that the 2006 cohort is now more focused on the psc(j) since the Masters has ceased.


27. This is a massive literature with many interesting points of convergence with PME, even though this is never teased out fully. The interested reader could start with, Carmen Medina, ‘What to do When Traditional Models Fail’, *Studies in Intelligence*, 46(3), 2002.

28. As an aside we draw the reader’s attention to an interesting rethinking about the role of military history in teaching PME. This, we believe, could potentially be used to good effect. See, Jeremy Black, ‘Rethinking Military History’, *RUSI Journal*, June 2005. For an approach that appeals to us see, Gerrit Gong, ‘The Beginning of History: Remembering and Forgetting as Strategic Issues’, *Washington Quarterly*, 24(2), 2001.


31. JET was created to make the changes determined by the Defence Efficiency Review. It was set a three year timeframe to accomplish the task. The position of Head JET ended in April 1999.


34. ibid., p. 51.


36. The Australian College for Defence and Strategic Studies was opened in October 1994 and retained its title until the end of 1998. From 1999 to the end of 2000 it was known as the Australian Defence College. It became the Centre for Defence and Strategic Studies in 2001.


38. The position of COMADC was in fact created out of the Head of Joint Education and Training.

39. We have in mind an ongoing evaluation team with reporting responsibility to COMADC. There is merit in that group implementing the kind of strategy as outlined in the, *Military Education: DOD Needs to Develop Performance Goals and Metrics for Advanced Distributed Learning in Professional Military Education*, July 2004.


43. This is not to suggest that such pressures are unique to the ADF. US armed forces are facing considerable pressures—including direct pressure from the Secretary of Defence himself—to ‘abbreviate’ PME during a ‘high stress period’. As Holmes points out, ‘plucking an officer from the classroom’ yields immediate tangible benefits for decision makers, while the longer term drawbacks are rather remote and abstract for political leaders. See James Holmes, ‘Restore History and Theory to Military Education’, *The American Thinker*, 26 May 2006, available at: <http://www.americanthinker.com/articles.php?article_id=5528>, accessed 1 June 2006.


Commonwealth of Australia, Joint Standing Committee on Foreign Affairs, Defence and Trade, Officer Education: The Military After Next, AGPS, Canberra, 1995.


D’Hagé, Brigadier Adrian, National Defence College of Australia, Report to the Chiefs of Staff Committee, April 1991.

Downes, Cathy, Senior Officer Professional Development in the Australian Defence Force: Constant Study to Prepare, Canberra Papers on Strategy and Defence No. 55, Strategic and Defence Studies Centre, Australian National University, Canberra, 1989.


Reorganising Air Force Doctrine

Wing Commander R.P. Pizzuto

At the heart of warfare lies doctrine.¹

General Curtis LeMay

Introduction

General LeMay’s statement is unequivocal in recognising the importance of doctrine to military endeavours. More contemporary wisdom also recognises doctrine as an essential ingredient of military capability. The Australian Defence Organisation (ADO), for example, recognises eight fundamental inputs to capability (FIC), all of which must interact to generate military capability. Command and management is one of these FIC elements, and encompasses doctrine. An alternative view of military capability suggests that it is derived from three main asset groups: structural capital, intellectual capital and social capital. Structural capital includes the tangible and highly visible assets, such as weapons systems. Social capital is less tangible and includes the notions of leadership, values and morale. Intellectual capital—the organisation's thinking power—encompasses doctrine and doctrine development.² The constructs may therefore differ, but the conclusion is the same: military doctrine has a pervasive influence on the organisation and structure of military forces, on the training requirements for these forces, and on the military plans for their potential or actual employment. Doctrine is, without doubt, an important enabler of military capability.

The term is however widely interpreted. The word ‘doctrine’ has a religious heritage but is now used across many disciplines, giving rise to scientific, political, and military doctrines to name a few. In the military context, most definitions make reference to fundamental beliefs or principles that guide the application of military force. The North Atlantic Treaty Organisation (NATO) definition is typical: 'Fundamental principles by which military forces guide their actions in support of objectives. It is authoritative but requires judgement in application'.³ The Australian Defence Force’s (ADF) pre-eminent doctrine publication, ADDP-D—*Foundations of Australian Military Doctrine*, defines doctrine more broadly as ‘the body of thought on the nature, role and conduct of armed conflict…[which] contains, among other things, the fundamental principles by which military forces guide their actions in support of national objectives’.⁴ Looking at definitions for air power doctrine more specifically, the Royal Australian Air Force’s (RAAF) AAP1000—*Fundamentals of Australian Aerospace Power* avoids a specific definition but promotes a RAAF view of doctrine encapsulating both fundamental principles and the ideas of teaching and learning. AAP1000 also notes that doctrine is prescriptive and authoritative, but not directive.⁵ The United States Air Force (USAF) defines air and space power doctrine more precisely as ‘a statement of officially sanctioned beliefs and warfighting principles that describe and guide the proper use of air and space forces in military operations’.⁶ For the purposes of this article then, a definition of air power doctrine that amalgamates key themes from the above definitions will be used. Air power doctrine is thus defined as a statement of officially sanctioned beliefs and warfighting principles that describe and guide the proper use of air forces in military operations. These beliefs and principles form the basis of institutional teaching and learning, and are prescriptive and authoritative without being directive.
Given then the important contribution that the RAAF’s doctrine—those officially sanctioned beliefs and principles about the employment of air power—makes to its overall capability, robust and institutionalised processes for the development, organisation and dissemination of such doctrine might be assumed. Such is not the case however, and an analysis of the problems specifically relating to one aspect of this process—the organisation of RAAF doctrine—is the essence of this article.

Scope. This article will discuss the requirements of a good doctrine hierarchy and describe the manner in which RAAF doctrine is currently organised. ADF guidance regarding the organisation of doctrine will then be reviewed, and alternative doctrine hierarchies employed by other Australian and Allied Services examined. Finally, a new RAAF doctrine hierarchy will be proposed.

What makes a good doctrine hierarchy

Before examining the RAAF’s extant doctrine hierarchy, the features of a doctrine hierarchy must first be defined. The Macquarie Dictionary defines a hierarchy as ‘any system of ... things in a graded order’. Different levels of doctrine are therefore implied. In the military context, two such levels are often articulated: capstone and keystone doctrine. Capstone doctrine is defined as the single, foundational doctrine publication that sits at the apex of a doctrine hierarchy, and from which all other doctrine is derived. Keystone doctrine is defined as the principal doctrine publication in a doctrine series. Keystone publications thus support capstone doctrine, and provide a framework for all subordinate doctrine publications in that series.

Unfortunately, the categorisation of doctrine is not limited to levels. Many different types of doctrine are also defined. Some types require no further explanation since their meaning is unambiguous; joint, multinational and single-Service doctrine are three such types. Descriptors for other types of doctrine are less clear however. A perusal of Australian and allied military doctrine publications readily uncovers references to strategic, operational, tactical, philosophical, application, procedural and basic doctrine. Definitions for some of these types are provided later in this article, but the point to be made now is that military doctrine is categorised in many ways, in terms of both its level within a hierarchy and its nature.

What then are the characteristics of a good doctrine hierarchy? One characteristic must be that the levels and types of doctrine within the hierarchy are unambiguously defined, and that the relationships between the levels and types are clearly articulated. The levels and types of doctrine should also align across related hierarchies. A good doctrinal hierarchy should present cascading doctrine in a logical and standardised way so that similarly themed doctrine can be easily identified within and between hierarchies. The RAAF doctrine hierarchy should, for example, align with that of the other Services and with joint doctrine. Similarly, Australia’s joint doctrine hierarchy should align as closely as possible with those of our major allies. Such hierarchical compatibility promotes more effective integration of doctrine through easier cross matching of subject matter, and ultimately aids interoperability. In essence then, a good doctrine hierarchy should possess two key features: clearly defined and standardised levels and types of doctrine, and a standardised cascading structure.
The RAAF doctrine hierarchy

Types of RAAF doctrine

AAP1000 recognises three types of doctrine: strategic, operational and tactical. Strategic doctrine is defined as ‘that collection of fundamental principles associated with the application of military force as part of a national effort’. The definition of operational level doctrine is more vague however; the AAP1000 states that such doctrine is usually more prescriptive than strategic doctrine, and that it is developed by operational commanders so that subordinate commanders are able to understand how the commander is likely to conduct a campaign, what forces are likely to be employed and in what capacity, and how they themselves might be expected to operate. Finally, tactical level doctrine is deemed to encompass tactical level guidance that is not explicitly directive in nature.8

AAP1000 also states that strategic and operational doctrine exists to define joint operations, and that operational level doctrine is reflected in the procedural series of Australian Defence Doctrine Publications (ADDP).9 The inference is thus that RAAF views strategic and operational doctrine as joint doctrine only; tactical doctrine alone is alluded to in a single-Service context. The overall conclusion is thus that RAAF recognises three types of doctrine, but that only tactical level doctrine is a single-Service domain.

AAP1002—Operational Air Doctrine Manual (first edition) was released in March 1999 with the stated intent of guiding commanders in the application of air power at the operational level of war. This manual aligns with AAP1000 in recognising strategic, operational and tactical doctrine, but also offers a more precise definition of operational air doctrine as ‘the set of fundamental principles concerning the employment of air power at the operational level in support of national objectives’.10

Hierarchy

AP1000 does not offer any guidance on the organisation of RAAF doctrine, and actually confuses the issue somewhat by stating that ‘aerospace power doctrine is not a formal part of the doctrine hierarchy…’11 AAP1002 does however proffer a hierarchy which accommodates all three types of RAAF doctrine. This hierarchy is represented in Figure 1.12 The hierarchy clearly identifies AAP1000 as the sole source of RAAF strategic level doctrine, AAP1002 as the sole source of RAAF operational level doctrine, and a panoply of Group/Wing Standing Instructions (SIs), tactical procedures and tactics manuals as the sources of RAAF tactical-level doctrine.

Extant guidance on doctrine hierarchies

ADF guidance on the types and organisation of joint doctrine is contained in DI(G) ADMIN 20-1—Australian Defence Force Joint Doctrine. This instruction recognises (but does not define) three types of joint doctrine—philosophical, application and procedural—and mandates two publication titles for specific types. Philosophical and application joint doctrine is published as ADDP and application doctrine as Australian Defence Force Publications (ADFP). A hierarchical numbering system based on the Common Joint Staff System (CJSS) is mandated for both
ADDPs and ADFPs. Of note, the instruction also identifies three other types of doctrine: draft, authorised and provisional. These descriptors relate only to the status of a doctrine publication however, and are not relevant to the issue of doctrine hierarchies. As such, they are not considered further in this article.

ADDP-D also enunciates a hierarchy for ADF doctrine, but several contradictions exist between the ADDP-D guidance and the requirements of DI(G) ADMIN 20-1. ADDP-D recognises three ‘tiers’ of doctrine: capstone, keystone and ‘other joint (application) doctrine’ compared to the philosophical, application and procedural types endorsed by the instruction. Furthermore, ADDP-D is articulated as capstone doctrine sitting at the apex of two separate sets of doctrinal publications: ADDPs, and single-Service doctrine. ADFPs are acknowledged as ‘procedural manuals’ only, which are ‘not to be considered doctrinal’. This statement contradicts the instruction’s view of ADFPs as procedural doctrine. Fundamental differences thus exist between the two authoritative sources of guidance with regard to the organisation of ADF doctrine.

Formal guidance on the organisation of single-Service doctrine, and RAAF doctrine in particular, is much more limited. DI(G) ADMIN 20-1 essentially ignores the issue, and there are no other general or Air Force instructions relating to the organisation of such doctrine. ADDP-D states simply that single-Service doctrine may cover the strategic, operational and tactical levels of operations. Confusingly, the same document also concludes that single-Service doctrine publications cover the operational and tactical levels of war only.
In essence then, formal guidance concerning the organisation of ADF single-Service doctrine is practically non-existent. This situation is exacerbated by the fact that information relating to the joint doctrine hierarchy, which might otherwise inform the organisation of single-Service doctrine, is largely contradictory. There thus appear to be few, if any, formal constraints upon the form of any prospective RAAF doctrine hierarchy.

Other doctrine hierarchies

Having thus reviewed the extant RAAF doctrine hierarchy and formal guidance concerning such hierarchies, other doctrine hierarchies will now be reviewed. Specifically, the organisation of Australian joint doctrine and the single-Service doctrine of the Royal Australian Navy (RAN), Australian Army, USAF and the Royal Air Force (RAF) will be reviewed. Such a process serves two purposes: it will provide evidence of what is required to achieve a degree of standardisation across hierarchies; and it may furnish ideas on how to improve the RAAF doctrine hierarchy.

Australian joint doctrine

Philosophical doctrine. Australian joint doctrine is organised in accordance with the requirements of DI(G) ADMIN 20-1, and is categorised as either philosophical, application or procedural. The ADDP-D—the ADF’s capstone doctrine—sits at the apex of the hierarchy. Five other capstone publications are also identified. These publications, numbered using an ADDP-D.X convention, include such publications as ADDP-D.2—Force 2020 and ADDP-D.3—Future Warfighting Concept. With the exception of ADDP-D.4—Joint Warfighting, these publications are conceptual works vice doctrine and their inclusion in the hierarchy seems misguided.

Application and procedural doctrine. The organisation of subordinate ADDP and ADFP publications within the hierarchy is orderly and logical, based as it is upon the CJSS. Under the CJSS, the keystone ADDP for each branch is designated as X.0, where ‘X’ represents the ‘J’ series branch number. ADDP 3.0, for example, is the keystone publication for the operations series. These keystone publications provide the link between each branch and the capstone doctrine contained in ADDP-D. Application ADDPs are numbered using an X.Y convention, where ‘X’ indicates the branch and ‘Y’ the publication’s discrete identifier. ADFPs are numbered similarly, but with an additional number or numbers to indicate their relationship to a parent ADDP and related ADFPs. ADFP 3.1.1, for example, is procedural doctrine related to the application doctrine contained in ADDP 3.1. A partial representation of the ADF joint doctrine hierarchy is shown in Annex A. All philosophical and keystone doctrine publications are shown, but only one series (Defence Logistics) is expanded to show its subordinate application (ADDP) and procedural (ADFP) doctrine. Of note, the USA, Britain and NATO all utilise similar numbering conventions based on CJSS for their joint/multinational doctrine.

RAN

The RAN’s pre-eminent doctrinal publication, RAN Doctrine 1—Australian Maritime Doctrine, endorses a hierarchy comprising keystone, philosophical, application and procedural doctrine. RAN Doctrine 1 is identified as the keystone doctrine for the RAN. No definition or example of philosophical doctrine is offered. Application and procedural doctrine are said to relate
to the operational and tactical levels of war and the detailed mechanics of operations at sea, but again definitions are not provided. A prospective publication, RAN Doctrine 2—*Australian Maritime Warfare*, is alluded to in the context of operational level doctrine, and Australian Maritime Tactical Instructions are identified as tactical doctrine.

RAN Doctrine 2—*The Navy Contribution to Australian Maritime Operations* was released in mid-2005, and offers a slightly different perspective on the RAN doctrine hierarchy. It identifies RAN Doctrine 1 as the Navy’s philosophical doctrine, and promotes itself as the RAN’s source of application doctrine. It is thus possible to infer from both sources a hierarchy for RAN doctrine, as depicted in Figure 2.

![Figure 2: RAN Doctrine Hierarchy](image)

*Army*

The Army’s pre-eminent doctrinal publication, LWD 1—*The Fundamentals of Land Warfare*, recognises the same three types of doctrine as DI(G) ADMIN 20-1: philosophical, application and procedural. Furthermore, comprehensive land-centric definitions are provided for each type, as follows:

a. Philosophical doctrine explains the fundamental principles behind the employment of land forces in military operations, and also describing the basic tenets under which land forces operate in a joint environment. LWD 1 is identified as the sole philosophical doctrine publication within the Army.
b. Application-level doctrine explains how philosophical principles are applied and is embodied in the LWD series.

c. Finally, procedural doctrine describes the skill-sets that are fundamental to the performance of set tasks by every individual soldier. It includes minor tactics, military techniques and procedures in the detail necessary to ensure team effectiveness and interoperability. Procedural doctrine, which has relevance in all-corps training and in the employment of skills across the Army, is referred to as Land Warfare Procedures – General. Doctrine that is only relevant within specific corps or functional areas is termed Land Warfare Procedures – Special.18

The Army doctrine hierarchy is illustrated in Annex B. The numbering of keystone application doctrine accords with the CJSS. The numbering of subordinate publications was not researched.

USAF

The USAF recognises three types of air and space doctrine: basic, operational and tactical. Each type is defined as follows:

a. Basic doctrine articulates the most fundamental and enduring beliefs that describe and guide the proper use of air and space forces in military action.

b. Operational doctrine describes the more detailed organisation of air and space forces and applies the principles of basic doctrine to military actions. It guides the proper employment of air and space forces in the context of distinct objectives, force capabilities, broad functional areas, and operational environments.

c. Tactical doctrine describes the proper employment of specific weapon systems individually or in concert with other weapon systems to accomplish detailed objectives.19

AFDD 1 is the USAF’s basic doctrine. Its stated purpose is to promulgate the USAF perspective on the employment of air and space power, and it thus focuses on how USAF assets can be organised, trained, equipped, and operated to conduct and support joint operations. USAF operational doctrine is contained in AFDD 2-series publications. These publications are organised functionally, with a keystone publication heading up each of eight functional series. Finally, USAF tactical doctrine is codified in Air Force Tactics, Techniques, and Procedures (AFTTP) 3-series manuals.

The USAF’s doctrine hierarchy is depicted in Annex C. As alluded to in the above paragraph, publications are not numbered in accordance with the CJSS but rather as either 1-series, 2-series or 3-series, based on whether they contain basic, operational or tactical doctrine respectively. Publications in the same series are numbered sequentially using an X.Y convention, where ‘X’ is the series number and ‘Y’ is the publication’s number within that series.

RAF

The RAF recognises three types of doctrine: strategic, operational and tactical. These types are defined as follows:
a. Strategic doctrine states the most fundamental and enduring principles that guide the use of air forces in military action. Strategic doctrine is the foundation of all air power doctrine; it establishes the framework and effective use of air vehicles.

b. Operational doctrine applies the principles of strategic doctrine to military actions by describing the use of aerospace forces in the context of distinct objectives, force capabilities, generic mission types and operational environments. Operational doctrine describes the organisation necessary for the effective use of air assets. It also anticipates the changes and influences that might affect future operations.

c. Tactical doctrine applies strategic and operational doctrine to military actions by describing the proper use of specific weapons systems and other types of systems to achieve detailed objectives. Tactical doctrine deals with the execution of roles and tasks.20

AP 3000—British Air Power Doctrine is the sole source of RAF strategic air power doctrine. RAF operational doctrine is guided by AP 3000 and framed by Joint Warfare Publication (JWP) 0-10—United Kingdom Doctrine for Joint and Multinational Operations. The RAF Air Operations Manual straddles the operational and tactical levels and provides detailed guidance for commanders. Dedicated RAF tactical doctrine is contained in various Tactics, Techniques and Procedures (TTP) manuals published by the RAF’s Air Warfare Centre (AWC).

RAF doctrine does not exist within its own framework however, but rather as part of a complex web of doctrine comprising single-Service, joint UK and multinational NATO doctrine. The preponderance of NATO publications in particular, many of which are sponsored by the UK, negates the need for specific joint or single-Service doctrine in many cases. NATO Allied Joint Publications (AJPs) and Allied Tactical Publications (ATPs) articulate NATO operational and tactical doctrine, and it is UK policy that national doctrine should be consistent with this NATO doctrine wherever possible. In circumstances where the UK does not ratify NATO doctrine or when NATO doctrine either does not exist or fails to adequately address specific areas, the UK typically develops national joint doctrine in the form of Joint Warfare Publications (JWPs) to address the deficiency. The net result is a wealth of joint and NATO operational and tactical doctrine covering most aspects of warfare, and a reduced need for specific RAF doctrine, particularly at the operational level.

RAF doctrine must therefore be placed in context by viewing it as part of the much larger hierarchy of British defence doctrine, which incorporates single-Service, joint and relevant NATO publications. A simplified hierarchy of British defence doctrine, which draws out the key air power elements, is shown in Annex D. Several features of this hierarchy stand out. First, there is relatively little operational RAF doctrine; the large majority of doctrine at this level is in fact Allied or joint. Second, RAF strategic doctrine is not directly linked to the hierarchy. Finally, the keystone operational publications are organised along CJSS.

Analysis of hierarchy review

Having reviewed various doctrine hierarchies, it is now possible to draw some broad conclusions about the requirements and possible shape of a new RAAF hierarchy. As discussed previously, a good hierarchy should possess:
a. clearly defined and standardised levels and types of doctrine; and

b. a standardised and logically cascading structure.

When considering the issue of standardisation, the broader issue of interoperability and specifically government policy regarding interoperability priorities comes into focus. This policy dictates that interoperability within the ADF is pursued within each Service first, then between the Services, then between Australia and the US, and finally between Australia and her other allies.

**Types of doctrine.** When considering the levels and types of doctrine that should comprise the RAAF doctrine hierarchy, standardisation between the Services and with joint doctrine is a priority. The levels of doctrine are straightforward; the terms ‘capstone’ and ‘keystone’ are clearly defined and uniformly applied. The types of doctrine pose more options however. Both allied air forces endorse operational and tactical doctrine, and either strategic or basic doctrine at the highest level. Australian joint doctrine and Army doctrine align in recognising philosophical, application and procedural doctrine, whilst RAN also recognises these three types in addition to keystone doctrine. There is no compelling argument as to why the RAAF should continue to categorise its doctrine differently, and the use of philosophical, application and procedural doctrine types to form the new hierarchy is therefore proposed.

**Structure.** Most hierarchies that were reviewed were organised along CJSS lines and seems an obvious choice as the basis for a doctrine hierarchy. Looking at the issue of publication titling/numbering, the ADDP/ADFP system of differentiating procedural doctrine from other doctrine by title and of using a cascading numbering system also seems eminently sensible.

**A new RAAF doctrine system**

The conclusions from the previous analysis provide a solid foundation upon which to build a new RAAF doctrine hierarchy. A proposed new hierarchy for RAAF doctrine is depicted in Annex E. The key features of this hierarchy are as follows:

a. **Types of doctrine.** It incorporates three types of doctrine, as follows:

1. **Philosophical.** Philosophical doctrine articulates the fundamental and enduring principles that guide the use of air power in military operations. It provides broad guidance on how an air force should be organised, trained, equipped, employed, and sustained, and is the foundation of all air power doctrine; it establishes the framework for effective use of air vehicles.

2. **Application.** Application doctrine explains how philosophical principles are applied in campaigns and major operations. It describes the use of air power in the context of distinct objectives, force capabilities, generic mission types and operational environments.
(3) **Procedural.** Procedural doctrine describes the proper use of specific weapons systems and other types of systems to achieve detailed objectives. It deals with the execution of roles and tasks at the tactical level of warfare.

b. **Titles.** Philosophical and application doctrine publications are titled Air Force Doctrine Publications (AFDP). Procedural publications are titled Air Force Tactical Publications (AFTP).

c. **Capstone doctrine.** One philosophical publication—a capstone document—sits at the apex of the hierarchy. This publication is titled AFDP 1-01, and would be similar in scope to AAP1000.

d. **Keystone doctrine.** A series of keystone publications embodying application doctrine are arranged along CJSS lines. These series align directly with the ADDP series of application doctrine. Each keystone publication is numbered using the X.0 convention. For example, the keystone AFDP heading the Operations series is numbered AFDP 3.0.

e. **Application doctrine.** Subordinate application doctrine in each series is also embodied in AFDPs, which are numbered using an X.Y convention. For example, application doctrine in the Operations series subordinate to the keystone doctrine is numbered AFDP 3.1, AFDP 3.2 and so on.

f. **Procedural doctrine.** Procedural doctrine is embodied in AFTP, which are numbered sequentially according to their parent doctrine using an X.Y.Z convention. For example, procedural doctrine in the Operations series subordinate to the AFDP 3.1 would be numbered as AFTP 3.1.1, AFTP 3.1.2 and so on.

The specific publication numbers and titles listed in the annex are intended only to illustrate the proposed numbering system, and do not imply specific content. Furthermore, the existence of all eight series is indicative only; it may transpire that less than eight are required, particularly if ADF joint doctrine is particularly comprehensive in specific areas. Application doctrine is, by its very nature, more joint and most application doctrine could be expected to reside in joint publications. Notwithstanding, certain aspects of air operations, such as the detailed functioning of an Air Operations Centre (AOC) would probably reside in RAAF doctrine.

**Disadvantages of proposed hierarchy**

**Doctrine development effort.** A hierarchy such as that proposed does have potential disadvantages. To date, the RAAF has been unable to institutionalise its doctrine-writing program in the same way that the Army has. The Air Power Development Centre is essentially focused on the production of philosophical doctrine, and the development of lower-level doctrine is somewhat ad hoc. Effective institutionalisation of the development of all types of doctrine will require considerable investment, particularly in experienced personnel, and the RAAF must be prepared to fund this investment if the hierarchy is to be populated with relevant and engaging doctrine. A failure to institutionalise the doctrine development process will result in a hollow and essentially useless structure.
Irrelevance. A second disadvantage of the proposed hierarchy is that its relevance may diminish as the space for single-Service doctrine becomes smaller in the face of a consolidated move towards increasing jointness. There will always exist a fundamental need for professional mastery at the single-Service level, and such mastery will be underpinned by procedural doctrine. The relevance of single-Service application doctrine in particular is more subject to change.

Advantages of proposed hierarchy

The proposed hierarchy does, however, offer advantages for RAAF capability, including the following:

a. **Standardisation.** It is based on the CJSS and thus aligns with a number of related doctrine hierarchies. Cross-referencing of similarly themed doctrine should therefore be easier.

b. **Identification of doctrine gaps.** The organisation and titling of doctrine will be standardised, providing scope for identifying gaps in current doctrine and making it easier for third parties to identify and access relevant doctrine.

c. **Recording of tactical lessons.** The hierarchy will provide a robust structure for capturing the lessons of recent operational experience in written form.

d. **Research resource.** The hierarchy, if properly populated, will provide a valuable resource for those seeking to determine the current state of air power doctrine in Australia. It may therefore serve as a launching pad for more focused conceptual thought on contemporary Australian air power issues.

e. **Low cost implementation.** Implementation of the new hierarchy is essentially an academic activity, and can be achieved at minimal cost.

Conclusion

Doctrine is an important contributor to military capability, but a sub-optimum doctrine hierarchy undermines its contribution in the RAAF context. The issue of doctrine hierarchies is confused however by a preponderance of terms for the different types of doctrine. Thus, one feature of a good hierarchy is that it clearly defines the types of doctrine that it accommodates, and that these types are standardised with related hierarchies. A second feature of a good hierarchy is that it presents cascading doctrine in a logical and standardised way so that similarly themed doctrine can be easily identified within and between hierarchies.

The current RAAF doctrine hierarchy lacks both features. AAP1000 and AAP1002 agree on the types of doctrine—strategic, operational and tactical—but they disagree fundamentally on the applicability of these types to RAAF doctrine. AAP1000 promotes a very tactical view of RAAF doctrine, with higher level doctrine being deemed to be exclusively joint, whereas AAP1002 endorses a full suite of RAAF strategic, operational and tactical doctrines. Furthermore, the endorsed doctrine types are different to those used in the Army, RAN and joint hierarchies. The RAAF hierarchy also lacks a clear structure.
Examples of better doctrine hierarchies do exist, and the ADF joint doctrine structure in particular offers useful insights into how the RAAF doctrine hierarchy could be improved. Such improvements might include a reclassification of RAAF doctrine types to philosophical, application and procedural, and the adoption of a hierarchy structure based on the CJSS and a cascading numbering convention. A new hierarchy possessing these features will only be useful if it is populated with contemporary and engaging doctrine, but this will require a more institutionalised approach to doctrine development than the RAAF currently endorses. The new hierarchy will, however, promote greater interoperability through easier cross-referencing of similarly themed doctrine, and will highlight gaps in doctrine more obviously than is currently the case. Implementation of the new hierarchy can also be achieved with minimal cost, since it is essentially an academic undertaking.

Annexes:

A. Partial ADF Joint Doctrine Hierarchy
B. Army Doctrine Hierarchy
C. USAF Doctrine Hierarchy
D. Simplified British Defence Doctrine Hierarchy
E. Proposed RAAF Doctrine Hierarchy

Wing Commander Pizzuto joined the RAAF in 1986 and graduated from the Australian Defence Force Academy in 1988. He qualified as an Air Defence Officer in 1991 and served for two-and-a-half years as a fighter controller at No 3 Control and Reporting Unit, RAAF Williamtown, before completing advanced weapons and tactics training on No 2 Fighter Combat Controller Course in 1994. In July 2001, he was posted to RAF Neatishead, Norwich, UK, where he served on exchange with the RAF as a NATO Master Controller. He returned to Australia in July 2003, and took up a post within Capability Development Group as a Desk Officer within the Aerospace Development Branch. He completed Australian Command and Staff Course in 2005, and is currently serving as Deputy Director Operations at Headquarters Air Command.
NOTES


7. These definitions were obtained online on the DRN by searching the Australian Defence Glossary. The glossary is part of the Defence Language Management System maintained by the Chief Information Officer Group, and can be accessed at: <http://dlms.dcb.defence.gov.au>.


9. Procedural doctrine is actually promulgated in Australian Defence Force Publications (ADFPs), and not ADDPs.

10. This definition is nothing more than an adaptation of a more general definition of doctrine.


12. ibid., p. v.

13. The CJSS comprises eight separate branches, each identified by a number as follows: 0 – Command, Leadership and Management; 1 – Personnel; 2 – Intelligence; 3 – Operations; 4 – Logistics; 5 – Plans; 6 – Communications and Information Systems (CIS); 7 – Training.


15. ibid., p. 1–3

16. This would seem to be in contradiction of the definition of capstone doctrine.

17. There is no official military definition of a concept, but they are generally described as untried and unverified ideas cast in a medium- to long-term timeframe which have been developed in response to either changes in the strategic or security environment or focused on emerging technology. Such ideas have to be thoroughly investigated by rigorous debate, systematically analysed and tested practically in order to transform them from simply creative thought into an accepted tactic or practice i.e. doctrine.


BIBLIOGRAPHY


Army Doctrinal Hierarchy

LWD 1
The Fundamentals of Land Warfare

Command, Leadership and Management 0-0
Personnel 1-0
Intelligence 2-0
Operations 3-0
Combat Service Support 4-0
Plans 5-0
Signals 6-0
Training 7-0
Preparedness and Mobilisation 8-0

C2
Leadership
Management

Personal Support
Health

Procedures
Operations

Surveillance & Recon
Information Ops
Manoeuvre

Supply
Maintenance
Transport/Movement

Fire Support
Air Defence
Mobility/Survivability
Specific Ops
Ops in Specific Environments

Individual Training
Collective Training
Training Safety
Weapons Training
OPFOR MAF
All Corps Skills

Land Warfare Procedures

Annex B
Simplified British Defence Doctrine Hierarchy

STRATEGIC

BR1806
British Maritime Doctrine
AC 71451
British Military Doctrine
AP 3000
British Air Power Doctrine

AJP 01
Allied Joint Doctrine
JDP 01
Joint Operations

OPERATIONAL

JWP 1-00
Administration
AJP 2/JWP 2-00
Intelligence
AJP 3/JWP 3-00
Joint Ops Execution
AJP 4/JWP 4-00
Logistics
AJP 5/JWP 5-00
Joint Ops Planning
AJP 6/JWP 6-00
CIS
JWP 7-00
Training

Maritime
Land
Air
SF
Other Ops
Operations Support

TACTICAL

RAF Air Operations

Air Warfare Centre Manuals

Annex D
Proposed RAAF Doctrine Hierarchy
Aspirational Concepts and Their Impact on Classical Maritime Theories

Commander M.H. Miller, RAN

It is incomprehensible that the whole naval force of each side should have gathered against the other again and again and simply fought for the mastery [of the sea], unless something was to follow when it was gained¹

Admiral Philip Colomb, Royal Navy (1899)

[Command of the sea] never has been and never can be, the end in itself. Yet, obvious as this is, it is constantly lost sight of … we come unconsciously to assume that the defeat of the enemy’s fleets solves all problems²

Sir Julian Corbett (1907)

In the quotes above, both Admiral Colomb and Sir Julian Corbett set out clearly that command of the sea is the way to an end, not an end in itself. The ends are those circumstances for which a nation wants to use the sea, which can also include preventing an adversary from using the sea for his purposes. Achieving command of the sea is the essential concern of maritime strategy, and the ways of achieving that command, specifically sea control and sea denial, have been at the heart of maritime theory for over a century. However, over the past decade we have seen a succession of new ‘aspirational’ concepts, many technologically based, which have been competing for attention in military and maritime strategy. Concepts such as Force Transformation, Network Centric Warfare and Effects Based Operations have been influencing maritime operations, perhaps pushing aside the classical theories. Experienced authors constantly warn us that these concepts, particularly the technologically based ones, should not become ends in themselves, so where do they fit? Are they the new ways or means to achieve command of the sea? What about the classical concepts of sea control and sea denial—where do they fit now?

Understandably, this onslaught of concepts can leave us puzzling how the pieces—old and new—fit together, or if indeed they can fit together at all. Moreover, it leaves us to question whether these are indeed new, or simply re-badged classical concepts, enhanced by technological enablers. Only by reflecting upon these dilemmas can we determine their relationship to classical maritime strategy.

This article examines how current military aspirational concepts relate to classical maritime theories. These military aspirational concepts include Force Transformation, Network Centric Warfare (NCW) and Effects Based Operations (EBO).

As the essence of this article is the relationship between aspirational concepts and maritime theories, the framework for the analysis will be based on the classical relationship of ends, ways and means. Firstly, the article explains the methodology and how the classic theories
and aspirational concepts relate through *ends-ways-means*. Then the article examines the essential features of maritime theories (as *ways*), before looking at Force Transformation and NCW (as *means*), and finally EBO (as *ends*), while relating them to maritime strategy and the classical theories.

**The *ends-ways-means* relationship**

Before delving into the detail of technology, strategy and concepts, it is important to understand first the way in which the framework will be applied. *Ends-ways-means* is a relatively simple relationship that is used every day to understand the influence of objects or concepts upon each other. In this framework, *ends* are the objective; *ways* are the forms through which a strategy is pursued; and *means* are the resources used to achieve them. This article will go further in the subsequent sections to explain each of these inputs to the relationship, but a broad treatment will set the scene first.

Colomb and Corbett’s quotes at the start of this article make it clear that for at least a century there has been implicit understanding of the need for an objective, or *ends* to military operations. Indeed, successful leaders throughout history have always thought more in terms of achieving effects on the adversary than of destroying him. The key is that any action taken should have a purpose ‘...something to follow when it was gained’ to quote Colomb again. Ultimately the *ends* should ‘effect’ the adversary so that he is dissuaded from pursuing a particular course of action. At the operational level, this can include destruction of his military forces, but it can also include psychological effects on his strategy makers and national political apparatus. This is the vital point of Clausewitz’s dictum regarding war as a continuation of policy by other means.

Somewhat proving that there are no new ideas in strategy, this historic objective to effect the adversary is articulated today in EBO. This effects-based concept is recasting planning at the national-strategic, military-strategic and operational levels. EBO is about focusing on achieving an effect on an adversary, before considering the capability that will be levered to achieve that effect. It relies upon information to achieve greater knowledge of an adversary and his vulnerability—military, political, psychological. However, what of the *means* to achieve these *ends* or effects, and how are these changing in the modern era?

In maritime strategy, ships and their crews are the classic expression of the *means* to achieve the *ends*. However, to these traditional *means* can be added all the military capabilities that have arrived since the start of the 20th century—submarines, mines, aircraft, precision guided munitions, instant communications—plus current aspirational concepts such as Force Transformation and technologically-enabled NCW. These are the tools available for operations, and their value derives from how they are applied to achieve the *ends*. EBO provides such an application, but what is the mechanism to bring the *means* and *ends* together?

This is where the challenge of examining the relationship between aspirational concepts and classical maritime theories begins. Most modern techno-centric analysis seems to focus on a direct link between the *means* of NCW (in particular) and the *ends* of EBO. However, similarly the classical analysis of Colomb and Corbett talk about the purpose of the command of the sea (encompassing sea control and sea denial) to achieve the *ends* also, which is also reflected today
in EBO. The analysis framework in this article proposes that the classical maritime theories provide the necessary strategy link, or ways, through which means and ends meet, across the tactical, operational and strategic spectrum, illustrated in Figure 1.

Without this link, there is the risk that in generating technological capabilities, we may lose sight of the enduring maritime strategies upon which attainment of our objectives are best achieved. For instance, in 2001 US military ground forces were propelled from the sea into land-locked Afghanistan in Operation Enduring Freedom. The strategic end or effect was to destroy the rear area and support for terrorist networks. The operational means were the aircraft, troops and weapons projected from the ships at sea. However, if sea control had been challenged around those ships, the security needed for the means to achieve the ends would have been negatively impacted. Indeed, primitive weapons such as mines or low technology asymmetric threats such as speedboats loaded with explosives could have seriously challenged sea control. Thus, the classical maritime theories for command of the sea continue to apply as the link between capabilities and effects, or means and ends.

The strategy ways – achieving command of the sea

To understand further how classical maritime theories are the ways and links between the current aspirational concepts, the essential concepts related to command of the sea need to be examined. Since the days when Colomb and Corbett penned the quotes above, achieving the absolute possession required by command of the sea has been eroded by the march of modern technology. Indeed, during the First World War Corbett recognised that technological innovations such as the mine, torpedo and submarine, made such absolute possession of the sea difficult, if not unattainable. He argued as early as 1911 that it was not possession of the sea that was of importance, but the use of the sea for movement of own forces that is the centre of maritime strategy.

![Figure 1: The Means-Ways-Ends Relationship](image-url)
Today, absolute command of the air, sea surface, water column, seabed and electromagnetic spectrum is further off than ever before. Consequently, the temporal and relative concepts of sea control and its corollary, sea denial, were developed as more realistic strategic ways. The terms sea control and sea denial can be used to define both conditions that can be achieved, and tasks that can be conducted by maritime forces. The condition of sea control exists when one has freedom of action to use a maritime area for one’s own purposes for a period, and, if required, deny its use to an adversary. The condition of sea denial exists when one’s adversary is denied the ability to use a maritime area for his own purposes for a period of time, without being able to exercise sea control oneself.

Sea control can be achieved at the operational level of war by decisive battle, or by the operational alternatives to battle: through use of a fleet-in-being approach and blockade. Decisive battle is where an adversary’s maritime forces are destroyed for strategic consequences, so conferring the ability to use the sea decisively and preventing the enemy from doing the same. Decisive battles have been relatively rare in the past and unlikely in the future with the strategic decline of state-on-state conflict. However, even a small-scale engagement, with the turning-back of an adversary’s force could be decisive. Similarly, engagements could be decisive where the result is the denial of access to straits or important sea routes. Conversely, a fleet-in-being approach is where an inferior force reduces the strategic value of a superior force by frustrating that force’s ability to exercise sea control by using harassment and avoiding decisive battle. Technology can be a serious enabler for the inferior force. Alternatively, the military blockade is where a force seeks to prevent the adversary interfering in a substantial way with the blockading force’s capacity to use the sea as it wishes. Blockading a port is an obvious example, but choke point operations are also a form of blockade. Aside from using ships, blockade can also be conducted using mines or submarines—again, technological enablers that can benefit smaller forces.

The reward for establishing sea control and/or sea denial is the capacity to use the sea for a country’s own strategic ends, and deny its use to an adversary. Specifically, in maritime strategy this is articulated as power projection ashore and permitting the use of sea lines of communication (SLOCs) by military, commercial and private shipping. Practical ways in which countries use the control they obtain include: asserting freedom of navigation rights; protecting the coast and offshore resources; moving and supporting troops; and maintaining local air and sea control in support of air and ground operations that influence events on the land. From the examples it can be seen that sea control has application not only in conflict, but also in peacetime and crisis, to achieve specific ends.

Since the end of the Cold War, increasing strategic uncertainty and the decline in traditional threats has seen maritime forces shifting from warfighting and the requirement for classic blue-water sea control. The shift has been toward power projection in the littoral and support for expeditionary operations in response to crises and ‘small’ wars. However, control of the sea, no matter if limited by time and space, is still a fundamental underpinning condition for power projection operations. Additionally, maritime forces are being used increasingly in constabulary and diplomatic tasks that protect and further strategic national interests. Essentially, the effects a country is trying to achieve with their maritime forces are changing.

To summarise, the classical theories of sea control and sea denial provide the underpinning purpose and conditions for maritime operations. However, the effort of achieving control,
by itself, is meaningless unless that control has an effect. Importantly, the need to gain sea control has changed little over the centuries, and the need for it will remain into the future, especially in support of power projection operations. However, the ends for which control is sought is changing with strategic uncertainty and new demands. Similarly, while ships, sailors and logistics are the most obvious means to gain control, technological developments have been bringing new tools to enable achievement of the ways and ultimately, the ends.

The resource means – Force Transformation and Network Centric Warfare

In the last decade, the ability of maritime forces to project power ashore from the littoral has become a strategic task of increasing importance. In response to this and other evolving strategic tasks, maritime forces have been undergoing what has become known as a Force Transformation. The drivers for Force Transformation were initially trying to take advantage of new information technology advances, now embodied in NCW. However, Force Transformation has also increasingly aimed at achieving balanced fleets that can meet evolving strategic tasks in peacetime and crisis. The aim is to have a range of balanced capabilities, including mine warfare, force protection and surveillance, which can meet conventional and asymmetric threats in the maritime environment, and so gain and maintain sea control. However, it is information management through NCW that has become the identified goal of transformation for most maritime forces, for it provides the competitive modern tools or means to achieve the ends.

The idea that information is important for maritime operations is not new; ships at sea have been sharing a common picture over wide distances for hundreds of years. Indeed, NCW was what Admiral Sir John Jellicoe of the Royal Navy was trying to achieve at the Battle of Jutland in 1916. The ‘Grand Fleet Battle Orders’ system of centralised command was intended to coordinate fleet fire, and thus apply maximum effect upon the enemy. To achieve this coordination, the system relied upon the speed and accuracy of the signal communication system. However, when the signal system (‘network’) failed, it undermined coordinated (‘centric’) fleet tactics and fire control (‘warfare’). The important point to note is that information sharing in networks is not new. However, the way in which technology is being used as means to achieve the right ends is new.

There has been much written about NCW, and most of the focus has been on the exploitation of technological advances in sensor systems, data processing, communications and precision-guided munitions (PGMs). In principle, NCW is more than just technology. It aims to combine doctrine, training and technology to manage information more effectively. The principal tenet is that networking improves information sharing, which enhances shared situational awareness, which in turn enhances the speed of command and ultimately increases mission effectiveness to achieve the effect ordered. Looking to history again, one author credits part of Nelson’s success at the 1805 Battle of Trafalgar to NCW. Apparently, Nelson’s NCW was not about swift information exchange, but about shared understanding or ‘cerebral networking’. Over years of combat operations, a network of shared understanding had been developed between Nelson and his commanders. Thus at Trafalgar, Nelson was confident that all of his commanders would perceive the developing situation (‘information’) in the same way, and thus would have shared situational awareness. Furthermore, Nelson was equally confident
that his commanders understood his intent, and so, without further direction, would exploit weaknesses in the enemy line and conduct mutually supportive actions. This is a classic example that reminds us that NCW is about more than technology; it is about understanding and decision-making.

Ultimately it is not just about having information or a transformed, balanced maritime force, but having the circumstances to do something useful about it in pursuit of the ends. The link between the means and the ends is guided by maritime strategy. For instance, networking of dispersed maritime forces can be of great benefit as a means to enable sea control or sea denial in complex littoral environments. Similarly, the technology of weapons and platforms such as submarines, can be a serious enabler for an inferior force who is aiming to achieve its strategic ends through blockade or fleet-in-being strategies. Finally, while the classical maritime theories may be modified by such technological development, they will not be fundamentally altered.

In summary, maritime strategic theories are the circumstances through which NCW and Force Transformation assist in achieving the objective required. In terms of NCW, the relationship is well summarised by Admiral Cebrowski, the ‘father’ of US Force Transformation and NCW:

Network-centric warfare offers the means to support the strategy to attain national objectives. It is applicable at all levels of warfare, and it is transparent to mission, force size and composition, and geography. This transparency underscores and confirms NCW as a means. In contrast, ways or strategies must be intimately involved with mission, force size and composition, and geography.

The objective ends – Effects Based Operations

In the first section of this article, the necessity of the ends or objective of any military operation were highlighted through Colomb and Corbett’s quotes, and the concept of EBO was introduced as the modern articulation of these objectives. EBO is spearheading a shift from the capability-led, attritionist-based planning of the 20th century, to effects-led planning. Information tools, such as NCW, are lynchpins in EBO for they not only provide greater knowledge of an adversary and his vulnerabilities, but also enable rapid information dissemination and collaboration. This results in a better appreciation on how best to dissuade an adversary from a course of action.

Destruction and attrition of the adversary is no longer the only way of achieving the ends. Effects can be physical or psychological, and exist at either the operational, military-strategic or the national-strategic levels, and can be applied in peace, crisis and war. For instance, psychological effects at the national-strategic level may only involve the threat of military force, and rely on diplomacy, economic sanctions or support for economic and political reform. An operational physical effect could range from annihilation to attrition, containment or denial of an adversary’s military forces or commercial means (such as shipping or infrastructure). Similarly, an operational psychological effect could be achieved by using military forces for coercion, deterrence, manipulation or punishment of an adversary’s political will. In all cases, through EBO, ends are clearly identified before capability means or operational ways are determined.
Without clear guidance of the ends to be achieved, there can be no clear understanding of what success is, at any level—whether at the strategic, operational or tactical level, and whether in conflict, peace or crisis. Indeed, a successful political or strategic effect may not require tactical success. Recalling the Battle of Jutland in 1916, while a tactical disappointment for the British, they succeeded in stopping the German fleet from destroying the British commercial blockade and thus seizing the initiative in the North Sea. This had far wider strategic and operational consequences, and the ends achieved were thus successful in the longer term.

The important implication of EBO for maritime operations is that while the ways may not alter, the means to achieve them will be adapted as demanded by the end. This is not a new concept, and to quote Admiral Sir Herbert Richmond from 1946: ‘Command of the sea is the indispensable basis of security and whether the instrument which exercises that command swims, floats or flies is a mere matter of detail.’ An historical example that illustrates this is the Turkish domination of the Dardanelles in March 1915. Effectively, sea denial was executed by artillery means ashore to achieve the national-strategic ends of denying the Allied reinforcement of the Russians. Today, there are additional technological means to achieve these wartime operational objectives: submarine attack, missiles, mines and air attack. The technology may have changed, but the ways and ends have not.

In summary, the means that can be used to achieve EBO ends are changing with weapons technology and NCW advances. However, the ways in maritime operations have endured for at least a century, and are independent of any particular means.

**Conclusion**

Turning back now to the initial questions posed—where do these concepts and theory fit? The ends-ways-means framework provides a simple way to relate the modern to the classical. It starts by correctly identifying the effect or ends of a campaign, before capability means or operational ways are determined. Next, the ways define how a strategy is implemented to achieve the ends. Finally, the means are the resources needed to achieve the ways that achieve the ends.

Throughout history, fighting decisive battles or blockading an adversary were the ways in which command of the sea was achieved, and thus the ends pursued. Over the last century, absolute command of the sea has given way to the more practical conditions of sea control and sea denial. The aim is to ensure that a nation can use the sea for its own purposes, by either interfering with an adversary’s control or preventing them from interfering. Whatever the condition, such control is the ways to an ends – not an end in itself.

The means by which ways achieve ends have also been changing over the last century, and particularly in the last decade. Force Transformation concepts grew in response to the shifting strategic circumstances after the Cold War. Increasingly, the roles of maritime forces are moving beyond the blue-water and SLOC protection, and into littoral power projection and expeditionary operations. Fleets are being ‘balanced’ so that they can conduct and support operations in conflict, peace and crisis, and take-up greater diplomatic and constabulary roles. Enabling this transformation have been rapid improvements in information technology,
particularly in the concept of NCW. By sensing and sharing information more widely and more rapidly and accurately, the decision making and situational awareness of maritime forces is growing. Networking of dispersed forces in a complex littoral environment is improving the ability of a maritime force to gain and maintain sea control, and thus the ways to the ends.

Proving perhaps that there are no new ideas in strategy, the implicit understanding that means and ways need an objective, or ends, is embodied in the modern concept of EBO. The effect, whether physical or psychological, must be decided before the tools or the strategies are determined.

Interestingly, the underpinning concepts of NCW and EBO existed, in practice, well before the last decade. Examples at the Battle of Jutland in 1916 and the Battle of Trafalgar in 1805 are cases in point. In the end, while technology is changing the means, and there is new terminology and concepts for the ends, the classical theories related to the command of the sea continue to provide the ways to link maritime operations.

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As the Deputy Director of Surface Combatants, Commander Miller oversees combat capability development for the RAN’s Guided Missile Frigates and Anzac Class Frigates and future surface combatants. Commander Miller has been selected for command of the Anzac Class Frigate HMAS Perth.

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NOTES


2. Julian Corbett, England in the Seven Years War, 1907 quoted in Till, ibid.

3. The concept for this framework is based upon one used by Alan Stephens in his work on effects-based operations (EBO) strategy, and also articulated by the Royal Navy in BR 1806 British Maritime Doctrine. Of note, the Royal Navy EBO philosophy regards effects as the outcome from ends-ways-means: 'the selection of the Ends (the objectives), the Ways (the options), and the Means (the capabilities) ... collectively determine the Effect that is to be delivered'. However, for this article, both effects and objectives will be considered collectively as ends. Alan Stephens, The End of Strategy: Effects-Based Operations, Strategic and Defence Studies Centre Working Paper No. 383, Australian National University, Canberra, 2003, p. 1; Ministry of Defence BR 1806 British Maritime Doctrine, Third Edition, The Stationery Office, 2004, pp. 203–204.


5. Command of the sea is defined as ‘the ability to use the sea in its entirety for one’s own purposes at any time and to deny its use to an adversary’. Although valid in a theoretical sense, it is almost unattainable in a practical sense as it relies upon the complete destruction or neutralisation of the adversary’s forces. Royal Australian Navy, Australian Maritime Doctrine, RAN Doctrine 1 - 2000, First Edition, Defence Publishing Service, Canberra, 2000, p. 144.


8. Sea denial can be either defensive or offensive. Defensive sea denial includes prevention of an adversary’s power projection through maritime strike and defensive mining. Offensive sea denial includes shipping interdiction and offensive mining campaigns.


14. John Hattendorf ‘What is a Maritime Strategy?’ in David Stevens (ed.), In Search of a Maritime
Strategy: The Maritime Element in Australian Defence Planning since 1901, Canberra Papers on Strategy and Defence No. 119, Strategic and Defence Studies Centre, Australian National University, Canberra, 1997, p. 15.


21. Commonwealth of Australia, ADDP-D.3 (ADDP-D.02) Future Warfighting Concept, Policy Guidance and Analysis Division, Department of Defence, Canberra, December 2003, p. 29.

22. ibid., p. 16, 26; Luddy, The Challenge and Promise of Network-Centric Warfare, p. 3.


24. ibid., p. 144.


30. ibid., p. 5.


BIBLIOGRAPHY


——, *ADDP-D.3 (ADDP-D.02) Future Warfighting Concept*, Policy Guidance and Analysis Division, Department of Defence, Canberra, December 2003.


Review Article

The Somme – Two Reflections on a Battle

AUSTRALIANS ON THE SOMME: Pozieres 1916
Peter Charlton
Published by Methuen Haynes, 1986

THE SOMME
Robin Prior and Trevor Wilson
Published by University of New South Wales Press, Sydney, 2005

John Donovan

Not expecting to see you again before the spring campaign opens, I wish to express to you in this way my entire satisfaction with what you have done, so far as I understand it. The particulars of your plans I neither know nor seek to know. You are vigilant and self-reliant, and pleased with this, I wish not to obtrude any constraints or restraints upon you. While I am anxious that any great disaster … shall be avoided, I know these points are less likely to escape your attention than they would be mine. If there is anything wanting which is within my power to give, do not fail to let me know it. And now, with a brave army and a just cause, may God sustain you.

Abraham Lincoln to U.S. Grant, 30 April 1864

Introduction

Almost since it began on 1 July 1916, the Battle of the Somme has exerted an almost morbid fascination on those Anglo-Saxon nations that participated in it, a fascination matched in the First World War only by that on Passchendaele and Verdun. By contrast, the great successes of the ‘Hundred Days’, the advances made on the Western Front between 8 August 1918 and the Armistice, receive less attention.

These two books were written almost 20 years apart. They take dissimilar approaches, but exemplify that fascination. Charlton describes in detail a small part of the battle, essentially the Australian actions around Pozieres and Mouquet Farm from late July to early September, and also covers the attack at Fromelles on 19/20 July, away from the Somme region. Prior and Wilson cover the whole battle, but focus at a higher level.

AUSTRALIANS ON THE SOMME: Pozieres 1916

Writing almost 70 years after the battle, Charlton’s view is that of the men on the ground, with less attention on the higher-level machinations. Haig dismissed the Australian contribution on
the Somme as ‘minor operations’, however, from a relatively small force of some 85,000 on 8 July, these ‘minor operations’ incurred almost 28,500 casualties (including those at Fromelles) in less than two months.

Charlton tells us a tale of arms and the man. He principally looks at the actions of privates, corporals, lieutenants and captains. In his book, we meet and follow the fortunes of those actually advancing on the German lines, and see the necessary brutality of the battlefield in detail. In one place, Charlton describes the effect of artillery on individual soldiers, an issue of great importance to Prior and Wilson. The Red Cross casualty inquiry records in the Australian War Memorial are replete with eyewitness reports of such casualties.

Some of Charlton’s work has been dated by more recent research. His description of the early British part in the battle, for example, repeats the generally accepted story of the 1 July attacks being made by extended lines of overloaded troops advancing steadily towards the German lines. Prior and Wilson address this issue in detail, and demolish this myth in their book.

In Charlton’s narrative, we meet men whose fame resounded throughout Australia between 1915 and 1918, such as Albert Jacka and ‘Pompey’ Elliott. Others did not receive their recognition, like a 45-year-old former bushman serving in the 3rd Battalion, Private Jenkins, who had been constantly in trouble out of the line. He devoted his last hours to caring for the wounded, finally being killed taking tea to them, and then passing into anonymity. Others cross Charlton’s pages who were to appear in the next war at a higher level, including Iven Mackay, Gordon Bennett, and Arthur Blackburn.

As with too many leaders on the Somme, Haking (the corps commander) blamed the troops for the bloody failure at Fromelles, the 61st (2nd South Midland Territorial) Division being described as ‘not sufficiently imbued with the offensive spirit to go in as one man at the appointed time’. More bizarre, he thought that the ‘attack, though it failed, has done both divisions a great deal of good’. Presumably higher casualties would have done even more good! Charlton quotes the British official historian, Sir James Edmonds, saying that he didn’t think Haking ‘was much use after his wound … in 1914’. Perhaps not, but Haking retained his command until the end of the war.

At Fromelles, another failing of the British command was displayed, to the great detriment of any trust in it that the troops might have developed. The attack, costing some 7,000 Australian and British casualties, was described in the communiqués as ‘some important raids’ that captured about 140 German prisoners. The 5th Australian Division alone lost around 400 prisoners. As mentioned earlier, Haig described the Australian involvement at Pozieres as ‘minor operations’. Such descriptions shook confidence in official British reports, as the broad facts, particularly the scale of casualties, soon became known in Australia.

The initial Australian attack on Pozieres went well, in one of those night attacks that Haig (quoted by Prior and Wilson, and by Charlton) considered not even possible in a peacetime exercise. However, in another of his less than felicitous interventions on the battlefield, Gough told Walker to cease the preparatory artillery fire before his next phase. This gave the Germans time to redeploy their artillery, and retaliate. Gough also indicated to Birdwood his theory for the offensive, to keep attacking with moderate numbers. The idea of a concentrated attack
seems to have been alien to Gough at this period, and Haig also was not taking control of the battle, allowing Gough to dissipate his efforts.

Gough provided the plan for the initial 2nd Australian Division attack at Pozieres, a plan which Legge, enthusiastic but inexperienced, accepted, but Brudenell White doubted. White, however, allowed Legge his way, as also with his artillery plan, which did not use the available heavy guns to best effect. Gough pushed for an early attack, although there was no particular need for haste. Perhaps inevitably, the attack failed, leading to an exchange between Haig and White, when White corrected some of Haig’s post-battle criticisms. White also insisted that later attacks be carefully prepared. While Charlton is vigorous in his criticism of British generals, he also levels criticism at Australians when he considers it deserved. He describes Legge as a good administrator, but accepts Bean’s assessment, that he was not ‘conspicuously a fighting leader’.

As the battle progressed, the repeated attacks, generally with only small forces, made less and less ground successively. In late August, Gough again intervened on the battlefield, involving himself in the planning of a brigade attack (by directing that it repeat the direction of two previous failed attacks). White proposed a phased attack, with the initial phase being from a different direction, as success there might open the way for Gough’s proposal. As it happened, the whole attack failed, but its planning was symptomatic of the poor strategy of repeated minor attacks in this period.

Charlton refers to the poor quality of British intelligence. As an example, three days before the German offensive against Verdun began, Haig confidently told a French general, and a day later, Robertson (Chief of the Imperial General Staff) that a blow was likely against the British, not the French. Only limited understanding seems to have been gained of the German defensive systems on the Somme, despite broad air superiority (over an area where the chalk soil made detection of defensive positions relatively easy), the availability of prisoners for interrogation, and the earlier capture of some positions. Prior and Wilson elaborate frequently on this failing.

Charlton covers the debate between Haig and Rawlinson as to the best method of attack on 1 July, and the objectives to be sought. At the preliminary stage, Rawlinson (in views supported by Foch) favoured a phased, step-by-step approach, while Haig sought deeper objectives. Prior and Wilson elaborate frequently on this failing.

Charlton also remarks on the gap between the perceptions of the rear area staff and the reality of events in the firing line. In one example, while a soldier in the line recorded being ‘shelled ceaselessly’, the Reserve Army War Diary recorded that the ‘day was on the whole quiet, with less shelling at Pozieres’. While effective communications between front and rear were a continuing problem during the entire First World War, it is hard to credit such a gap between perception and reality!

Australian discipline was a major concern of the British high command. In a foretaste of an incident at El Alamein during World War II (when soldiers of the 51st Highland Division were ordered to polish their brass before the attack, so making themselves conspicuous⁴), Haig was displeased with a system of discipline that left badges and buttons unpolished. Even Gough
apparently found this displeasure a bit much! However, neither seemed to understand a system of discipline that did not rely on external form.

As the strains of the Pozieres/Mouquet Farm battles showed in an increased level of desertions, Birdwood, Rawlinson and later Haig all asked that the death penalty be imposed on the AIF. The Australian Government refused, and continued to refuse as the war progressed, despite support from Australian generals, including Glasgow, Holmes and Monash. Although Birdwood supported the death penalty for the men under his command, Haig considered that he was too soft in his approach to discipline in the AIF. As casualties mounted, and under unsubtle pressure from the War Office, Hughes twice tried to introduce conscription for the AIF. Both referenda failed.

The AIF returned to the Somme in October 1916, and struggled through the bitter winter months. Charlton refers to the final (British) attack of the battle, at Beaumont–Hamel, and to the increased strength it gave to Haig at a forthcoming conference of Allied commanders. Prior and Wilson are more robust, indicating clearly that Beaumont–Hamel was attacked to strengthen Haig’s position at that conference. It could not strengthen the position of the British high command with the AIF; whose disillusion flourished with officers who could not understand or learn the imperatives of a new kind of warfare.

Charlton does not see the British generals as wicked, but as ‘ignorant and inadequate, limited by intellect, experience and training’. They seemed to be unable to organise coordinated attacks, persisted in tactics that had not succeeded, and did not implement on a wider scale and in a timely fashion those that did. Charlton sees Pozieres as a foundation point for Australia’s modern suspicion and resentment of the British.

**THE SOMME**

Prior and Wilson, writing almost 90 years after the event, cover the overall battle, but concentrate on the higher level. As an indication of their focus, only a few men below the level of divisional command are mentioned in their book, and even the higher commanders are treated impersonally. They do not introduce us to many of those individuals who fixed bayonets and advanced to their front against the German defences.

A key question that stands out in Prior and Wilson’s work is, quite simply, who was responsible for the battle? They show clearly that it was not, contrary to myth, a case of the generals wandering off on an adventure of their own. Their constitutional masters in the government, although not entirely comfortable, approved the concept. During the battle, they reviewed progress, but despite developing concerns, allowed matters to proceed for almost five months. While they had doubts, they did not act on them. Prior and Wilson, in their description of the progress of the battle, show why these concerns developed.

Prior and Wilson also show clearly that the popular image of lines of soldiers walking stolidly across no-man’s-land to their deaths on 1 July was not typical. One well-known incident was actually reserve troops advancing above ground from their lines to the British front line, and up to 30 per cent of the British casualties on 1 July may have occurred behind their own front line. Prior and Wilson record that, of the 80 battalions in the first attack on 1 July, 53 crept
out into no-man’s-land close to the German wire and rushed the German line from there, ten rushed the German wire from their own parapet, no evidence exists for five, and the remaining 12 advanced at a steady pace across no-man’s-land, at least some of them because they were following a creeping barrage.

The instructions provided to lower level commanders were often so broad as to allow of almost any interpretation, speaking, for example, of ‘celerity of movement’, but at a ‘steady pace’, albeit that on occasions the ‘rapid advance of some lightly equipped men’ might be appropriate. At least this left room for initiative! As Prior and Wilson note, Rawlinson eventually stated that ‘there can be no definite rules as regards the best formations for attack’. They list the variety of tactical approaches used, including some units that advanced into no-man’s-land before the barrage lifted, while others used dispersed formations. Only a few units advanced in the formal lines of popular image. Some of these were among the most successful, for which Prior and Wilson give credit to the effectiveness of the artillery support they received.

One problem was that reports of successful penetration of the German lines led to additional attacks to reinforce a success that was, often, only a rumour. The result was only to increase the casualties. Compounding the problem, such reports generally led to the reduction or cessation of artillery support, to avoid hitting them, but making the advance of their supports even more dangerous. Poor communications once an attack started plagued all commanders in this period. Unfortunately, on too many occasions when communications were effective, the information provided was incorrect.

Australians recognise the ordeal of the 5th Australian Division at Fromelles, where 5,533 casualties were suffered in just over 24 hours, as probably our worst day of the war. It is sobering to realise that several British divisions suffered similar casualties in less than 12 hours on 1 July. Fromelles, less than three weeks later, also produced scenes, found often on 1 July, where communication trenches were so blocked with dead and wounded that the only way to advance (or retire) was in the open. Amazingly, however, one attacking battalion on 1 July escaped even a single death. But another in the same division had 500 casualties.

Too many of the attacks made after 1 July were rushed, despite demands from Haig and others for careful planning (often the rushed attacks were ordered by the same commanders who demanded careful preparation). Haig’s ongoing conviction that the Germans were about to collapse contributed to this failing. It was a further two years before the Germans did crumble, and even then their dour artillery and machine gunners continued to resist. Haig’s demand on one occasion that there must be no ‘delay to organise a great attack which will take time to prepare’ cannot have helped clarify his desires to Rawlinson. Later, Haig called for ‘careful and methodical’ preparation to be ‘pushed forward without delay’. While Haig has a reputation for being inarticulate, perhaps on many occasions he was too loquacious?

In preparation for the 15 September attacks, Haig sought bold action, which might yield ‘decisive results’. As with his perpetual optimism about collapsing German morale, some of Haig’s thoughts seemed to have been around two years in advance of practicality. His apparent confidence that tanks, in their first operation, would produce a breakthrough on a scale that would allow the cavalry to advance tens of miles into the German rear areas now seems little more than a flight of fancy.
Six weeks later, Haig was still dreaming of a great cavalry breakthrough. In late October, after extended heavy rain, when men on foot could not operate effectively, Haig and Gough contemplated an advance by three cavalry divisions. The Battle of the Somme finally petered out in November, at Beaumont–Hamel. That attack was political, to give Haig a stronger bargaining position at a conference of Allied commanders. Limited objectives were set, as to preserve his standing Haig needed at least a nominal victory, but definitely not a clear defeat. The conference over, Haig restrained Gough’s enthusiasm for further advances in appalling weather. After almost six months, Haig finally imposed his will on an over eager subordinate (as a change from pushing an often reluctant one, Rawlinson, towards unachievable objectives).

Prior and Wilson’s section on the Australian contribution to the Somme battle is brief. The initial refusal of Walker, commanding the 1st Australian Division, to be rushed into battle was commendable among so many examples of lesser moral courage. The successful night attack to capture Pozieres proved that wartime soldiers could carry out such manoeuvres, decried by Haig less than a fortnight earlier as ‘hardly … possible even in a peace manoeuvre’. The next, hasty, attack to capture the OG lines showed once again the folly of such poorly planned efforts. Charlton covers these events in more detail.

On four occasions between July and October 1918, the British planned for a great breakthrough to release the cavalry into the German rear areas. In pursuit of this objective, they incurred some 432,000 casualties. Of these, Prior and Wilson state that 71 came from the cavalry, whose actual participation might tactfully be described as minimal. The casualties in individual British infantry divisions ranged from 2,000 (37th) to more than 17,000 (30th). The three Australian divisions engaged had casualties ranging from 7,248 (4th) to 8,113 (2nd). In addition, the 5th suffered 5,533 casualties at Fromelles. One of the reviewer’s great-uncles died at Pozieres with the 4th Australian Division.

Before the battle had commenced, Rawlinson commented that ‘I … fully realise that it may be necessary to incur … risks in view of the importance of the object to be attained.’ This seems to foreshadow Haig’s 22 August 1918 message to his army commanders that ‘[r]isks which a month ago would have been criminal to incur, ought now to be incurred as a duty’. Unfortunately, during 1916, the risks came from poor British planning as much as from effective German defences. Two more years were necessary to overcome these obstacles.

Prior and Wilson are scathing on the level of training received by reinforcements, but suggest that neither infantry training, nor the specific tactics adopted by the infantry, determined success; rather, it was the artillery which mattered. This does not give due credit to the level of training required to follow closely behind a creeping barrage, or to capture machine gun posts missed by the artillery, which in that era was essentially an area, not a precision, weapon. Prior and Wilson also mention the first shadows of ‘peaceful penetration’, conducted so successfully by the Australian Corps in mid-1918, but again seem to overlook the level of infantry training needed to carry out such operations (often without artillery support).

Prior and Wilson note that the futility of bombarding distant targets while the infantry had not yet attained their initial targets took some time to become obvious. They conclude that the key to victory on the Somme was decisions at higher levels, particularly on the use of
artillery. With echoes of the French maxim that ‘artillery conquers, infantry occupies’, they conclude that ‘if fire support was adequate a well-trained division could exercise its skill and capture its objectives. If such support was absent a Maxse, Tudor or Walker [divisional commanders with good reputations] could make no difference whatever’.

Their belief in the primacy of the artillery is not shared by all writers. Others, such as Travers and Griffiths, see the key to victory in cooperation between arms, particularly the infantry and artillery, in the absence of a decisive breakthrough weapon, a task neither cavalry nor tanks were then able to perform.

The number of uncoordinated attacks launched after 1 July demonstrated a great failure of command. Prior and Wilson show that only rarely did divisions of the same corps, much less adjacent corps or armies, cooperate in launching attacks. Attacks were launched on narrow fronts (allowing the Germans to concentrate their resources against the attacking troops), without adequate preparation. Artillery in adjacent formations was allowed to stand idle while attacking troops lacked sufficient support, and German artillery was not sufficiently subject to counter-battery fire. Ensuring coordination between arms and between force elements was a task of commanders.

The Principles of War were not formalised until 1921, but any thought that such principles might be found seems to have escaped the attention of many commanders. As well, lessons already learned were often not passed on. So, for example, the 38th (Welsh) Division, relieving the 7th Division, was not told of the value of the creeping barrage by its predecessor, which had gained some success by its use on 1 July. As late as mid-September, one of the corps commanders had still not realised the value of the creeping barrage.

Another fault among commanders was an unfortunate propensity to blame the troops for lack of success. After a failed attack on 8 August 1916 (two years later, 8 August would be a more propitious date), Rawlinson blamed the infantry for ‘want of go’ and inferior training. Haig, for once thinking clearly, recognised that the problem was in the plan. Directed by Haig to himself draw up a new plan, Rawlinson tried, but the result was not happy. Haig still did not feel the need to replace Rawlinson, despite finding ‘something … wanting in the methods employed’.

Later, army, corps and divisional commanders blamed the lack of ‘martial qualities’ and ‘poor spirit in the men’ for a failed attack on Schwaben Redoubt. The divisional commander pointed to a lack of training and discipline, apparently oblivious that he had some responsibility for these points. The battalions concerned had lost between 30 and 50 per cent of their strength in the failed attack. Presumably if they had lost 90 per cent, all would have received praise.

On one occasion a corps commander rebelled openly at his orders. In November, Cavan insisted that he would not repeat an unsuccessful attack until Rawlinson had personally seen conditions at the front. Rawlinson agreed the attack was impossible, and persuaded Haig to scale it down. Haig later reversed his decision; the operation proceeded and failed with 2,000 casualties. On other occasions, however, Rawlinson effectively ignored Haig’s orders to seek a deep penetration, and sought humbler targets.
Among the senior commanders, the corps commanders varied in skill. At Hawthorn Redoubt on 1 July, for example, the corps commander decided to detonate a mine ten minutes before zero hour, and also to ‘lift’ the artillery barrage in his sector at the same time. The result was to expose the attacking troops to enemy machine guns, with the inevitable result. The point of the barrage was to suppress the enemy, so it should not have been difficult to forecast the result of lifting it early. Lead battalions of the British 31st Division, which had advanced into no-man’s-land, were effectively destroyed before Zero Hour. Other corps commanders had similar negative influence.

Of the army commanders, Prior and Wilson dismiss Gough quickly as deserving only obscurity. Rawlinson is seen as a more complicated figure, but lacked fixity of purpose, and essentially followed Haig’s conceptions. Prior and Wilson show Haig and Rawlinson regularly at opposite ends of the spectrum. When Rawlinson was seeking limited objectives, Haig would demand deeper thrusts. When, however, Rawlinson was optimistic, Haig might be cautious.

Unfortunately, when they synchronised it was almost always on the side of optimism, planning for unattainable objectives. Rawlinson’s plan for 1 July changed from a limited advance in support of the French to a breakthrough for the cavalry, with Haig seeming to envisage a breakthrough battle on Napoleonic lines, a concept he returned to later, ignoring the technical changes that had eliminated the possibility by 1916. Even Rawlinson found this concept impossible to take seriously.

The British Government was not well served by Robertson in its relationship with Haig. Robertson’s interventions were at times bizarre, as in the figures he offered at different times for German casualties. Churchill, not then in the Cabinet, estimated that British losses on the first two days were five times German. Robertson, responding indirectly, claimed on 1 August that the Germans had by then lost at least 1.25 million men, compared to British losses of 160,000. It is hard to accept that Robertson believed the German total, or that of 3.575 million German losses since August 1914 that he offered four days later.

By late August, Robertson admitted that he ‘did not really know’ the level of German casualties. The politicians, however, did not question the figures, or other contradictory advice Robertson offered them. Writing after the war, with assistance from the German Reichsarchiv, Churchill concluded that total German casualties from July to October were approximately 200,000. Others incurred during the preliminary bombardment, and in November, suggest that the German total of 237,000 from June to December, just over half of the British/Commonwealth total, is reasonable.

While the politicians became progressively more concerned about the absence of worthwhile progress during the first 10 weeks of the battle, their reaction seemed to consist only of looking for other theatres where action could occur, not for the actual causes of failure on the Western Front. By October, Lloyd George and Robertson fell out over Robertson’s complaint that the War Committee was seeking alternative advice. Lloyd George’s reaction, that he was not a mere dummy of his adviser, was reasonable. Unfortunately, he was not prepared to force the constitutional point (or at least not until 1918).
Retrospect

The major problem for the British command was their slowness to learn. That lessons (such as the need for approach trenches) were learned quickly in I ANZAC cannot be attributed solely to colonial flexibility of mind, as both the corps commander (Birdwood) and the commanders of 1st and 4th Australian Divisions (Walker and Cox) were regular officers in British or Indian service. Some British commanders absorbed lessons rapidly; others never seemed able to do so.

The British inability to coordinate the operations of adjacent formations enabled the Germans to concentrate on defeating each limited attack. Twenty-five years later, Rommel in North Africa was frequently able to defeat elements of the 8th Army in succession, rather than having to face the whole force simultaneously. The more things change … !

Of the British leadership, in 1916 Haig and Rawlinson learned slowly, Gough hardly at all (although by August at Pozières he was pushing for the front to be held lightly, to minimise casualties from German artillery). In the end, responsibility for failure on the battlefield belongs to Haig, who ‘proved incapable of coordinating the actions of his two armies, … [nor did he] seek to impose his authority on the battlefield’.

While Haig adopted new technology, he failed to ‘overcome pre-war conceptions of a simple and understood theory of war’, and persisted in relying on the cavalry as a battle or war-winning weapon of exploitation. Objectives ranging from 50 to 100 miles away were set. None were ever in reach. Senior officers, like Haig and too many of his subordinate commanders, remained the captives of concepts learned in their youth, to which they tried to fit new technology. Younger leaders, with less time vested in their careers, could allow technology to drive the concepts. Can armies ever overcome this problem?

Prior and Wilson convincingly demolish a number of myths of the Somme. One of these is that Haig lacked imagination. To the contrary, his optimism about forever imminent collapses of German morale, combined with a romantic attraction for a Napoleonic style of warfare, led him to set tasks for the cavalry that were beyond the capacity of his force, given the technology of 1916. It remains debatable whether at any time after late 1914 the cavalry could operate freely in a relatively constrained area on the Western Front dominated by those two efficient killers, artillery and machine guns. The cavalry successes in the Middle East were achieved in a region less densely populated with soldiers and weapons.

It may have been their isolation from most classes of civilian society in pre-war Britain that led the generals to underestimate the intelligence of the New and Territorial Army troops at their disposal, and hence to a reluctance to plan complex manoeuvres. Yet those commanders who did try different tactical techniques were often successful. Haig initially opposed Rawlinson’s plan for night attacks early in the battle because the ‘troops are not highly trained and disciplined’ and the attack ‘would hardly be considered even in a peace manoeuvre’. Yet as an alternative he proposed an attack that involved a highly complicated turning manoeuvre, and open to a flanking German counter-attack. Haig, as so often during the battle, could not make a clear decision. When eventually, the night attack proceeded, the troops deployed successfully, the German front system was captured quickly, and the second line soon after.
The stark contrast between Lincoln’s trust in Grant’s military skills, demonstrated in his letter to Grant quoted at the beginning of this article, and the British Government’s mistrust of Robertson’s and Haig’s skills, is shown by a minor incident detailed in Chapter 2 of Prior and Wilson’s book. When the War Committee queried the value of maintaining a large force of cavalry in France, given the demands it made on shipping space for fodder, it escalated into a challenge to the government’s constitutional authority. However, the whole incident quickly blew over. The government asserted, but failed to exert, its authority, while the army failed to even try to convince the government that there was value in maintaining the cavalry! This set the stage for the rest of 1916.

One wonders whether a Lincoln in Downing Street might have had the moral courage to sack Haig. Under the United States Constitution, Lincoln was Grant’s Commander-in-Chief, and he had previously sacked even popular generals like McClellan when he lost faith in them. His trust was founded on involvement in Grant’s appointment. Asquith (and later Lloyd George) were in a different position as constitutional advisers to their sovereign, but in practice the Cabinet had appointed, and could have removed, Haig. They held back from this decision, while neither trusting, nor fully supporting, him.

The ultimate failure on the Somme rests with the civilian leadership. The War Committee was less than thorough in its investigations of the plans, particularly the important issue of the relative balance of artillery. Its members did not act when their concerns about progress and casualties increased. Part of the government’s problem was that it could see no realistic alternative to operations on the Western Front, but the War Committee lacked the nerve to assert its authority over Haig and Robertson, and thus failed the soldiers in the trenches.

However, perhaps the War Committee’s problem was not only the lack of alternative theatres of war, but also of alternative candidates for command. During World War II, Brooke, then Chief of the Imperial General Staff, has been described as spending hours poring ‘over the Army List in search of suitable divisional commanders’.9 He is said to have wanted to be ‘merciless with divisional and corps commanders whom he thought not up to their job, but he did not think he could find better men to replace them’.10

That lack of alternatives seemed to be a problem also in the earlier war. It is hard to imagine Robertson poring over the Army List seeking replacements for Haig, Gough or Rawlinson, and neither the other Army commanders in 1916 (Monro, Plumer and Allenby) nor most of the corps commanders, commented on above, stand out as obvious alternatives. While the War Committee lacked the moral courage to replace leaders in whose ability it had lost confidence, it also lacked options. Faced with a similar problem, Lincoln chose a man who would not have met any test set by Robertson, but who produced results.

**Conclusion**

There may be good reasons why after two years of war the British command had not learned what tactics would work, but it is difficult to discern such reasons. That many lessons were only sinking in by November 1916, after five more months of heavy fighting, beggars belief. While it is never possible to offer certainty in alternative versions of history, it seems unlikely
that concentrating on 'bite and hold' operations within range of the British artillery could have produced less productive results. If these operations had been coordinated between divisions, corps and armies, they may even have produced better results than actually achieved.

Another recent book on the Battle of the Somme suggests that it was a necessary precursor to victory in 1918, because of the experience it provided. While there might be some truth in this suggestion, it seems hard to avoid the conclusion that sufficient experience could have been gained with fewer casualties and in less time.

Despite the quote below, Prior and Wilson would probably believe that there was too much German and too little British artillery on the Somme, and that the British artillery available was not used to best effect. Charlton might comment that neither were the other arms and services used to full effect. Pace Prior and Wilson, it is difficult to avoid the conclusion that even better use of the artillery would not have changed the result, unless Haig, Rawlinson, Gough and their corps commanders had improved their ability to make best use of all the resources available to them.

Let the final word on the Somme come from the level of those who fought the battle:

‘There’s too much fuckin’ artillery in this bloody war’ said Jakes irritably, as though they had all failed to appreciate the fact. ‘You don’t get no sleep’.

Frederick Manning, The Middle Parts of Fortune, Peter Davies, 1977, p. 222

John Donovan worked in the Department of Defence for over 32 years, principally in the fields of intelligence, force development and resource management. He also served for several years in the Australian Army Reserve.
NOTES


Book Reviews

ARTHUR TANGE:
Last of the Mandarins

Peter Edwards
Allen & Unwin, 2006
ISBN 1 741146429

Reviewed by Alan Thompson

I suspect that Peter Edwards’ biography of Sir Arthur Tange will be the only biography ever written on the man. Given his exceptionally long period as Secretary to two major Commonwealth Departments, his role in Australia from the Second World War to 1978 will doubtless feature in books on the history of those decades. However, neither Sir Arthur as a person, nor the positions he held, are likely to be interesting enough to create enthusiasm in the future to revise this volume, or to produce another one. So for those who are interested in the person of Tange, and the role of the Commonwealth Public Service mandarins more generally, this is likely to be the definitive biography.

In the Preface, Peter Edwards defines his themes as ‘policy, personality and public administration’. A question for the reader, and for the future historian, is the extent of his success in meeting those aims. In many respects, though not all, the success of the volume in providing a perspective on governmental policies and on aspects of the history of public administration, are somewhat easier to judge than the question of personality. To provide a balanced portrait of the private and public personas of Arthur Harold Tange could not be other than an extremely difficult task, even for an author as skilled and experienced as Edwards.

As is observed often and accurately by the author, Tange attracted very powerful reactions from those he dealt with directly and from phalanxes of those whom his actions affected. Virtually no one was neutral about him. Whatever the reaction to him, it was almost invariably extreme, ranging from close to hatred to enormous admiration and respect for him professionally and personally. A judgement on the biography is how well it describes and explains the man who could not only attract those extremes, but who could also attract the highest level of admiration and respect from those to whom he was behaving in ways that should have resulted in them at the least disliking him intensely.

My personal experience on his staff is summed up in comments quoted in the late Eric Andrews’ The Department of Defence, (Oxford University Press, 2001: 222) that I admired his ‘... powerful intellectual capacity, knowledge and skills. He was monumental...bigger than life. On the other hand he was extraordinarily difficult to work for, since he could be dictatorial and bad-tempered, with no tolerance for error. He was a real bastard to work for.’ Many close to Tange puzzled, along with Edwards, on how someone with so much leadership potential seemed only capable of driving with the lash. There will be many readers who have stood in front of the desk as
Sir Arthur, staring fixedly out of the window, would flay them for some sin of omission or commission, and then dismiss them with a ‘That’s all,’ as he turned deliberately to the work on his desk. Although he respected some of his subordinates, there will be remarkably few who received any form of an acknowledgement from him of a difficult job well done.

Overall, Edwards does succeed in describing the vast contradictions in Tange, beginning with a nicely turned observation in the Preface that Tange might have been wryly amused by the hymn sung by the congregation at his memorial service because, in reverse of God’s position, Tange was ‘extremely swift to chide and slow to bless’.

One of the strengths of the biography is the persuasive case, carefully constructed by Edwards, to explain how the influences on Arthur Tange, combined with elements of his personality, created his mind set and behaviour. Much of this is new and, although it is unlikely to endear him retrospectively to those he had abrasively trodden on, it does allow for a greater understanding and, perhaps, some sympathy. There is very useful material on, for example, the origins of his over-arching dedication to serving ‘the national interest’ and on another strong, and linked, belief that being a public servant was a vocation, not just a job. These beliefs pitted him against members of the military services whose inclinations and observations led them to believe that their definition of the national interest was the only valid one, and that public servants were the eleventh plague sent to frustrate the military serving the nation. They also led him to be blind to the fact that even public servants who shared his view of the Public Service being a vocation to serve the nation, did not share his rather extreme views on the hours you had to work and the single-minded focus necessary.

The biography also succeeds to a large extent in painting the policy and public administration environment of Tange’s period in public life. It is, however, a biography and not a history of public administration or governmental policies. Through necessity, Edwards’ focus has to be on the man and those elements of public administration or policies with which he was involved. Hence, as Tange was essentially sidelined from policies on Vietnam, the biography can do no more than touch on them, even though Edwards is the official historian on that and other South-East Asian conflicts, and has depths of knowledge that can only be touched on lightly in this book.

To my mind the least successful element in this book is the Appendix on 1975, covering the statements in Parliament on Pine Gap, the dismissal of the Whitlam Government, and the deaths of the journalists at Balibo. Here Edwards is on a hiding to nothing. If he did not cover these controversial events and Tange’s supposed role in them, he could stand accused of dereliction as Tange’s biographer. And yet including them, and stating his conclusions on Tange’s involvement or non-involvement, also leaves him open to accusations of selectivity and bias. I say this, not because I have any doubt whatsoever in his conclusion that ‘Tange was innocent of any impropriety in the three crises of late 1975. It was utterly foreign to his character and his credo as a public servant to be involved in a conspiracy against his elected government...’ The contents of the Appendix are not, however, any more convincing than other material which has failed to convince those who either created the canards or who were ready to believe them. That is, those who believed before reading the Appendix that Tange could not have behaved as his accusers implied, will have that judgement somewhat reinforced, and those who believed the reverse, will hew to their view, essentially regardless of what is written.
Sir Arthur Tange was a great servant of the public of Australia and of governments of both political persuasions. Edwards’ biography is a good read and describes as well as the written word can, the complexities, strengths and weaknesses of the man, and the historical context in which the last of the mandarins functioned.

Alan Thompson was the Head of Sir Arthur Tange’s personal and executive staff in 1977 and 1978, before serving 20 years as a Senior Executive in the Department of Defence. In the context of Sir Arthur Tange’s supposed involvement in the events of 1975, some years after Tange’s retirement he prepared a paper analysing the Pine Gap and dismissal crises drawing on all classified and unclassified Defence Department sources, including Tange’s diaries and personal notes. In regard to the Balibo deaths, in 1986 he analysed classified Defence Department material for the Minister for Defence to establish whether the government had had prior knowledge that could have saved the journalists.

MY YEAR IN IRAQ: The Struggle to Build a Future of Hope

Ambassador L. Paul Bremer III
Simon and Schuster, 2006
ISBN 0743273893

Reviewed by Major General J. Molan, AO

Ambassador Bremer’s book, My Year in Iraq, informed me of so much that I did not know about Iraq and reminded me of so much that I had forgotten. My first three months in Iraq overlapped with Ambassador Bremer’s last three months, and I was able to observe from a distance. This book put what I saw into context. It would do the same for any military professional.

Ambassador Bremer’s office was in a suite off the entrance rotunda in one of Saddam’s obscene palaces in the Green Zone. To kill the Ambassador was probably something that insurgents and extremists dreamed of, and because attack could come from anywhere, few were permitted to approach Bremer armed. As a Coalition general, the conditions written on my ID card told me that I was allowed to wear my pistol with a magazine inserted when I went to see him. Once my face became known, his heavily muscled Blackwater guards would betray their military backgrounds by half coming to attention as I entered. Certainly Bremer’s office was Ground Zero for mortars and rockets, and he was attacked on a number of occasions. Once when I accompanied Bremer in a visit outside the Green Zone, we were tired enough to think it hilarious that the call sign of the ‘Little Bird’ helicopter escorting him was ‘Arse Monkey’. The cost of personal protection for Bremer was in the order of US$15 million for each six-month period. From my personal observation, and even more from reading this book, it was money well spent.

The distance along Route Irish from the military headquarters at Camp Victory to the Coalition Provisional Authority (CPA) bastion in the Green Zone was only about ten kilometres, but the gap between the CPA and the military at that stage in Iraq was far, far wider. Working with the Coalition Provisional Authority was not a popular pastime among my American comrades and so they were very glad that I was to be the ‘General-in-Residence’ in the Green Zone with the
CPA. Life was hectic to say the least and looking back on the first three months of my year in Iraq as part of an occupying army, I cannot believe how much I did not know. Reading Jerry Bremer’s book, My Year in Iraq, was a true revelation for me.

The myths and legends about the CPA period in Iraq started to appear at a very early stage in the CPA’s existence. Bremer addresses almost everyone of these issues, and, because of my involvement, I found the discussion fascinating. The sensitivity in taking over from retired LTG Jay Garner who headed up the predecessor to the CPA. The trouble in getting credible staff for the CPA. The looting that followed the invasion. The issue of disbanding the Iraqi Army. Generating electricity and pumping oil. Trying to recruit 30,000 police in 30 days. Abu Ghraib. The setting up of the constitution-like Transitional Administrative Law. Finding effective Iraqi advisers and leaders. The de-Ba’athification program. The adequacy of the number of US troops committed to the Phase IV task. The first battle of Fallujah. Almost everything is there. The one thing that is missing, and the one thing that I would have liked to have heard from Bremer’s side, was his relationship with the military commander in Iraq, LTG Ricardo Sanchez. But I suspect that that discussion will have to wait for a long time to come.

I overlapped with Bremer for the first three months of my year in Iraq. I worked in great intimacy with Bremer’s CPA staff on issues of infrastructure security and I routinely briefed Bremer. To Bremer, I would have been just another Coalition general who floated in and out of his panelled office. My personal view was that he was a most impressive man. He made things happen and most of them were right. He made some errors—any of us would probably have made at least the same number or types of errors. Getting things done is a trait that I admire more than any other in a leader, and Bremer was a tough and effective man. He also made other people do things and he was dealing with a diverse and complex group. He caused things to occur by example and direction, but also by bluff and by anger. I can personally attest to this and I am not so precious as to feel injured by it.

And the issues were so important in Iraq that on many occasions there was little room for personal politeness. If Bremer had failed in the first year of our struggle in Iraq, then the base would not have existed for the political achievements that have marked the next two years. At the moment in Iraq there is a race between perceived success (especially political) and the resilience of the US will to fight. If Bremer had failed in establishing the base, the Coalition would be at least as fatigued by the war in Iraq as it is now, but we may not yet have finished the political process so successfully. What chance then of sustaining the US will to fight? Bremer gave us that solid start.

Even from his own book I cannot make a judgement as to why Bremer was chosen to be the ‘Proconsul’ in Iraq. He does not mention any particular skills or experience that would have specifically prepared him for such a critical job. He was a retired Ambassador with experience in counter terrorist work and postings in countries that one can only imagine were not US ‘tier one’ priority. Perhaps Bremer’s links with Rumsfeld were what mattered and perhaps the entry and exit pattern of US diplomats to and from public duties, interspersed with time in the commercial world, is what made him what he was.

The criticism of Bremer and his CPA staff early in 2004 from the military at my level was harsh to say the least, and very personal. Many would say that such friction was inevitable given the
culture of State and the culture of Defense in the US (and, who knows, perhaps between Foreign Affairs and Defence in Australia). On the few occasions when I saw Sanchez and Bremer interact both publicly and in small meetings, the body language was appalling, the tension palpable. But at no stage did Sanchez ever make any derogatory comment about Bremer in my hearing, he was truly loyal in every way, and very reactive to every one of the CPA's sometimes bizarre demands. I must admit to feeling very uncomfortable with the portrayal of Sanchez in the Ambassador's book. There was no direct criticism but the use by Bremer of Sanchez' purported direct speech was patronising and is a good indicator of the underlying tensions. In my view, Sanchez was better than he is portrayed and he deserves more.

I do not subscribe to the belief that such friction is inevitable between great institutions of State, even those with vastly different cultures, nor between great leaders. The proof is there to be seen in those who replaced Sanchez and Bremer. The leadership team of Casey and Negroponte is the antithesis of the Bremer/Sanchez relationship and is a leadership case study that deserve a dozen PhDs to study it.

This is a book that I needed to read, and that any student of higher civil and military interaction needs. Having been in the thick of many of the things that happened, and having seen the great results of Bremer's work, I stand in true admiration of him and what he achieved. There may have been another way of doing things, but the real test in something as important as our fight in Iraq is success, and Ambassador Bremer succeeded.

THE OSTER CONSPIRACY OF 1938:
The Unknown Story of the Military Plot to Kill Hitler

Terry Parssinen
HarperCollins, 2004
ISBN 1844133078

Reviewed by Dr Andrew Gaczol

Twenty-eight September, 1938. Friedrich Wilhelm Heinz, hand picked leader of the conspiracy’s raiding party, assembled his group at the Army Headquarters in Berlin. Heinz handed out the weapons and explosives that he had received from Admiral Canaris, Head of the Abwehr—Germany’s military intelligence service—the previous day. The predawn silence of Berlin was broken by the ‘click-click-click’ of ammunition being loaded into carbines and automatic weapons. Should Heinz have met no resistance during the storming of the Reich Chancellery, then he had been ordered to create an ‘incident’ so that Hitler would be killed. All would move forward, provided Prime Minister Chamberlain and the British held fast against Hitler’s claims to Czechoslovakia’s Sudetenland…

Terry Parssinen’s 2003 book, The Oster Conspiracy of 1938: The Unknown Military Plot to Kill Hitler, is a fascinating insight into a rarely reported chapter of the German resistance to the Nazi regime. The conspiracy, which Parssinen observes has been dismissed by some
historians such as William L. Shirer and J.W. Wheeler-Bennett as indecisive, ineffectual or simply cowardly, is given a fresh perspective through Parssinen’s discovery of the Deutsch Papers at the US Army War College in Carlisle, Pennsylvania. Harold Deutsch—the late, distinguished Professor of History at the University of Minnesota—gathered extensive information on the conspiracy after establishing close relationships with the surviving conspirators, their widows and other family members. Parssinen’s review of Deutsch’s papers, left to the US Army College in 1995, has given the world a far greater insight into the conspiracy’s details.

Centred around a senior Abwehr officer, Lieutenant Colonel Hans Oster, the conspiracy brought together civilians and military officers, some—like Oster—because they despised the Nazi’s philosophy and were horrified by the regime’s excesses, but many who simply feared that Germany was not yet ready for war with the West, and would again lose disastrously just as it had in 1918.

Parssinen’s research reveals that the conspirators had extended feelers high into the British Government—including direct contact with the Foreign Secretary, Lord Halifax—and had vociferously tried to convince the British to stand firm against Hitler’s demands with the quid pro quo that they would remove Hitler and the Nazi regime. History shows that, despite Halifax’s increasing sympathy with the conspirator’s cause, the British Foreign Office remained sceptical fearing that any new German Government, while eschewing war, would maintain Hitler’s territorial ambitions whatever their democratic credentials and diplomatic good intentions were. Moreover, Parssinen exposes the ‘conspiracy within the conspiracy’—the decision to kill Hitler. This objective was not revealed to all the conspirators, as many felt that Hitler’s murder would surrender any claim the new government had to political legitimacy. Oster, Heinz and a select few made the decision believing—almost certainly correctly—that an imprisoned Hitler would remain a dangerous threat.

The Oster Conspiracy, of course, collapsed. Chamberlain went to Munich and signed the agreement giving ‘peace in our time’. Nonetheless the book is enthralling, managing to keep a sense of suspense despite the reader already knowing the outcome. The narrative is written such that the reader is aware of the key decisions simultaneously being made in London, Berlin, Prague and Munich.

Oster and most of his fellow conspirators did not survive the Second World War. Many continued to resist the regime, and planned other assassination attempts such as the March 1943 attempt to blow up Hitler’s aircraft, and the so-called ‘bomb-plot’ of 20 July 1944 led by Colonel Claus von Stauffenberg. Generals von Witzleben, Hönper and Beck—part of the 1938 plot—were all killed as a direct result of the 20 July attempt. Oster himself was ultimately exposed for his anti-Nazi activities, and was executed on 9 April 1945 at Flossenbürg concentration camp. Parssinen speculates that Oster may well have heard the sound of the approaching US Army’s guns as he mounted the gallows that early morning.

It remains completely appropriate that the world never forgets the Nazi regime’s atrocities—they hold a special place in the 20th century’s barbaric history and there can never be a justification for them. It must also be remembered that public support in Germany for Hitler’s regime stayed solid right up to the end of the war. But Parssinen’s book reminds us—along
with the memorials to the Stauffenberg bomb-plot of 1944, and Hans and Sophie Scholl’s ‘White Rose’ resistance group—that there were Germans of courage and conscience from all walks of life—including the armed forces—during the period of the Third Reich.

AUSTRALIAN AND US MILITARY COOPERATION:
Fighting Common Enemies

Christopher Hubbard, Curtin University of Technology, Australia.
Ashgate Publishing Limited, 2005
IBSN 07 564 2429

Reviewed by Lieutenant Colonel Chris Field

Without inhibitions of any kind, I make it quite clear that Australia looks to America, free of any pangs as to our traditional links or kinship with the United Kingdom.

John Curtin
Prime Minister of Australia
21 December 1941

This well researched book on the origins and development of the ANZUS Treaty, which is known universally as ‘ANZUS’, represents an essential text for Australian and United States decision makers within diplomatic, military, or economic specialisations. This book also provides valuable insights for teachers and students concerned with the interaction of Australia and the United States since the Second World War. Christopher Hubbard has developed a vast knowledge of ANZUS, and he comprehensively addresses the practicalities of issues germane to the treaty, as a ‘resilient and sophisticated alliance relationship’, through his examination of strategic, operational, and tactical perspectives using an historical prism.

Christopher Hubbard’s thesis is that ANZUS, in the absence since 1986 of New Zealand, consists of: ‘two mismatched Pacific powers—one the single remaining superpower, the other a self-proclaimed “middle power” and increasingly a South Pacific hegemon—and [ANZUS] has now endured for over half a century.’ Christopher Hubbard also notes that ANZUS, along with the 2004 Australia/United States Free Trade Agreement, is one of the most concrete expressions of a much wider, Australian and United States, relationship of mutual respect, cooperation, and national interests that reach back to the Second World War.

As a textbook, Christopher Hubbard includes some useful definitions of political theory as background to various stages of this book. Examples include his detailed description of the theories behind the development of alliance relationships, government decision making, as well as examining foreign, social, and, economic policies. This mixture of political and social theories supporting the practicalities of ANZUS greatly enhances the value of Hubbard’s work, making it an ideal text for academics and students alike. Christopher Hubbard is able to deftly integrate often dry theory with the interesting dilemmas and challenges faced by both Australia and the United States in the ongoing development of ANZUS. As a final synthesis of
Christopher Hubbard explores an interesting theme in his book regarding the ‘influence of powerful individuals’ in the development and eventual signing of ANZUS on 1 September 1951. Protagonists such as Australian Second World War Prime Minister Curtin; Australian post-Second World War Prime Minister Chifley; Prime Minister Chifley’s Minister for External Affairs, Dr Evatt; and, Evatt’s successor Percy Spender, each exerted a significant degree of personal influence of what later become the ANZUS Treaty. On the US side, John Foster Dulles, President Truman’s Special Representative, was equally influential in determining the path by which the negotiation of the treaty could proceed.

While ANZUS the treaty has never been amended, Hubbard makes the important point that the intent of the Alliance has changed. In particular, ANZUS speaks of security and armed attacks in the ‘Pacific’ and the ‘Pacific Area’. Clearly ANZUS, which is used to buttress Australia’s contribution to the 21st century’s ‘War on Terror,’ has been broadened from these original definitions, and has now been ‘extended through mutual agreement to virtually any region of the world in which joint US/Australian military operation [sic] can viably take place.’

All ADF warfighters, and key Australian Government decision makers, should understand the origins and impacts of Australia’s foreign policies on ANZUS, especially as our nation once again grapples with the friction between the strategic paradigms of Defence of Australia and Forward Defence. ANZUS, commencing with the emergent expansionist threat to Western hegemony from Mao’s China in 1949; to America’s desire for unanimity among its allies regarding the Peace Treaty with Japan; and taking as its model the NATO European security treaty, accelerated Australia into the orbit of the United States. Subsequently, the evolution of US policy on China and Taiwan in the 1950s; responses to Indonesia’s claims over Dutch-controlled West Papua in 1961–62; the Commonwealth’s ‘Konfrontasi’ with Indonesia in 1963; and involvement in Vietnam all solidified the prevailing Australian Government view that ‘an ally who behaved as an ally could reasonably be expected to the treated as an ally.’ This view was unfortunately dampened by President Nixon’s 1969 Guam Doctrine of self-help for America’s allies.

Ironically, despite the Guam Doctrine, Australia, as the junior partner to ANZUS, and as the ally who has always sought the comfort of US protection was, following the 11 September 2001 attacks on the United States, the first partner to enact ANZUS. In Hubbard’s view this irony is explained in that ‘strong bilateral alliances do not survive in the long run through subservience of the weaker partner to the stronger, but must be based on a mutual understanding that the resolution of the inevitable disputes acts to enhance, rather than weaken, the relationship.’

The nuclear question is given detailed analysis by Christopher Hubbard, both in regards to the New Zealand Lange Government’s 1986 intransigence with the US Navy, and in Australia’s decision to forgo nuclear ambitions, which it had harboured from the early 1950s until 1968, in favour of an enduring alliance with the US. Hubbard provides some thought provoking work.
with regards to just how close Australia was to becoming a nuclear power, when 'the Australia government was faced with a stark choice: a nuclear Australia or the American alliance.'

Hubbard’s discourse on the negotiations, development, and eventual signing of the 1968 Nuclear Non-proliferation Treaty (NPT), and Australia’s key role as the ‘only US ally which refused to go along with the NPT without significant protest’ is instructive. Hubbard explains that Australia gained great leverage from its ‘near-nuclear status’ in helping to keep the United States accountable with regards to the content and context of the NPT, especially in relation to the definition of nuclear weapons manufacturing. Hubbard’s nuclear treatise presents some fascinating reading, and remains a story largely unknown to most Australians.

Christopher Hubbard takes a future look at ANZUS into the 21st century; a journey which he states began on 11 September 2001, with two major questions: ‘how can ANZUS accommodate a rapid transformation of the regional and global security equation, and, on which priorities must Australia focus if it does so?’ He offers some ideas, all of which will continue to challenge the ADF and our American allies during this century. For this reason alone, Australian and US Military Cooperation: Fighting Common Enemies should, on both sides of the Pacific, be considered essential professional reading.

PLUNGING POINT:
Intelligence Failures, Cover-ups and Consequences

Lance Collins and Warren Reed
HarperCollins Publishers, Sydney, 2005
ISBN 0732281644

Reviewed by Bob Breen

For some readers, the authorship of this book will shape their attitudes to it. Lance Collins and Warren Reed are both whistleblowers. Though their circumstances were different, they have ended up as exiles from Australia’s intelligence community. This book puts their case. Are they patriots who deserve gratitude? Or are they cranks, who should be publicly condemned again for criticising the conduct of the Australian Government and its intelligence services? Is it a professional and credible assessment of the state of national and international affairs? Or is the book about their personal ‘baggage’? It addresses an important subject and ranges widely over vital issues. But does it have something important to say?

The book begins with a strong, sweeping narrative that warns about weakening of Western civilisation, rising Asian power and declining of Western values in general, and a consequent degradation of the Anglo Intelligence Club’s (US, UK, Australia and NZ) capabilities in particular. The authors conclude that intelligence has become ‘a handmaiden to policy, rather than being the anvil upon which it is shaped’. Having unsettled Western readers with apocalyptic observations, peppered with historical examples, the narrative becomes educative with continuing rueful comments about the unsatisfactory conduct of Anglo Club governments, their bureaucracies and their intelligence services. The purpose, as put by Phillip Knightly in
the Foreword, is ‘to set down how intelligence actually works’. The next six chapters contain a potted history of intelligence services and an exposition of the nature of intelligence and its roles within international relations, in the service of economic and strategic interests of nation states, as well as during war.

These educative chapters set the scene for Chapter 8, a description of a new American strategy of world domination that is driven by the need for oil as well as the control of oil and energy resources to rival economies, such as China and India. The authors describe a neo-conservative agenda in the United States that echoes the doctrine of Manifest Destiny that was one of the ideological underpinnings of 19th century American imperialism. They draw comparisons to the Age of Imperialism by pointing out that it culminated with the first large-scale industrial war in 1914–1918. They conclude that this new age of American imperialism may result in provoking a protracted conflict with radical Islam—the jihadists—and a war with China.

Having suggested that Western civilisation may be approaching its plunging point and China and India will become ascendant, the authors then narrow the focus to Western intelligence failure, cover-up and consequences. The opening chapter in this part of the book on intelligence failure is instructive and concludes with a recommendation to have review mechanisms in place to guarantee impartiality. The next chapter deals with the elements of cover-up, and the tactics and techniques of governments to suppress ‘truth-tellers’. Its language is strong and reflects the anger of the authors at their treatment and what they describe as the ‘premeditated bureaucratic execution’ of a few and the destruction of the careers and wellbeing of others. There is a lacerating, bitter edge to the narrative that relates government responses to truth-tellers, (the authors do not appear to favour the term ‘whistle blower’) with sorcery, human blowtorching and a ‘precise, ritualistic and meticulous choreography’ of deceitful cover-up techniques.

Having described modern Inquisition and martyrdom, the next chapter lionises the defenders of truth in the media, especially war correspondents and investigative media organisations and individuals who expose government and corporate misdeeds. Like victimised truth-tellers, journalists and their editors work in a manipulated environment where only a few succeed in maintaining journalistic integrity.

The final chapter returns to the theme of Western civilisation approaching its plunging point. The authors again state that whenever intelligence is suppressed or corrupted for political purposes the ethical basis for democracy is undermined. This chapter is not a strong conclusion to a forceful assessment of the state of intelligence capabilities in defending Western civilisation from barbarians that have already come through the gates and are gaining adherents domestically, regionally and internationally. Brief parting shots and exhortations in a three-page chapter do not do justice to the remainder of the book. Possibly meeting a self-imposed or publisher’s deadline overtook an obligation to draw themes together and make a resounding and compelling case for change. However, readers who arrive at this small chapter will already have a good idea of what the authors are on about and the merits or otherwise of their exposition and observations. Indeed, the two attached transcripts of an Australian Broadcasting Corporation television program on the circumstances of the suicide of Mervyn Jenkins, an Australian intelligence officer in Washington, and an ABC National radio program
on the leaking of documents related to investigations into the grievances that Lance Collins had with his treatment by the Australian Defence Force after returning from military service in East Timor in 2000 and his particular criticisms of the Defence Intelligence Organisation speak for themselves.

So, what might readers make of this mixture of history, political science, anecdote, observation, criticism and apocalyptic warning?

This book’s reception will largely depend on political and moral orientation. No reader will accuse the authors of dissembling. At the extremes, some conservatives will say that it is a mischievous anti-American, anti-capitalist and anti-establishment rant that should be ignored. Some socialists will say that it confirms that America in general and capitalism in particular threaten international wellbeing and are leading the world to political, social, and environmental disaster. Cynics may conclude that the authors have got it right, but that they should not have published this book because it will startle ‘the punters’ whose ignorance, apathy and docility are relied on by those in power.

Most readers will find it an uncomfortable and provocative book. The authors intend for it to be so. They warn that the democratic governments of the Anglo Club have corrupted their intelligence systems in a time when these systems are needed more than ever to identify, analyse and anticipate the actions of the enemies of democracy. This assessment is unsettling and, for politicians and bureaucrats working in those governments, inconvenient. The authors’ frank analysis of the motivations of ‘mercenary’ American capital to colonise the world in support of American interests is described bluntly. They are also blunt about Australia’s compliant role in a 21st century ‘mercantile’ version of The Great Game in the Middle East that was played by European colonial powers during the 19th century. However, the authors provoke readers to think about these matters. They can either agree with Collins’ and Reed’s interpretation or ask themselves why they don’t. This is the strength of the book.

The book’s description of Toynbee’s rise and fall of civilisations, the dynamics of national power, international relations and how intelligence should work contributes usefully to debate and understanding. The focus on the so-called Anglo Club is also important because this is the club that defended the world against the encroachments of military fascism and communism in the 20th century and is both the target and best defence against jihadist aggression in the 21st century.

One of the issues about this sort of book and its authorship is loyalty. For some readers, the fight against the enemies of democracy and the Western way of life demands loyalty and not a book that blows the whistle for 383 pages. Collins and Reed would argue that this type of loyalty is ‘the docile comradeship of silence’. The question is ‘Who’ or ‘What’ should demand ultimate loyalty. Elected governments and their intelligence services should expect loyalty from employees. However, do they suppress internal critics and provoke public disclosure? Do the acts of whistleblowers strengthen or weaken democratic governments and institutions? Are they useful corrections that bring governments and institutions back on course and remind them of their obligations? Or are they unhelpful interruptions to the way democracies really work in an imperfect world? Readers should keep in mind when reading this book where they believe the loyalties of its authors lie.
This book identifies three important ‘Golden Rules’. Intelligence is crucial for defeating the jihadist threat to Western democracies and secular Islamic governments as well as anticipating other threats. Intelligence analysis must be founded on objective truth and the best balance of probability. And intelligence estimates on threats to Australia’s national interests should be delivered fearlessly and secretly to the government of the day by competent, experienced and principled intelligence officers and officials. Collins and Reed argue that these rules have been—and are continuing to be—broken. For those interested in the future of Western civilisation in general and Australia’s future in particular, this book should be read to see if they have made their case.

Bob Breen is a research fellow at the Australian National University writing a volume of the official history of Australian Peacekeeping and Post-Cold War Operations. He is also a colonel in the Army Reserve working as the operations analyst for Land Commander - Australia. He has published several books on post-World War II Australian military history, his most recent was Mission Accomplished —Australian Defence Force participation in the International Force in East Timor.

A BRIEF HISTORY OF CRYPTOLOGY

J.V. Boone
Naval Institute Press, Annapolis, Maryland, 2005
ISBN 159 114 0846

Reviewed by Lieutenant Colonel Tim Gellel

A Brief History of Cryptology presents a chronological review of cryptology, which is described as the ‘arts and sciences involved in protecting one’s information from unintended recipients and also in exploiting [an adversary’s] information’. To do this, the author identifies a troika of technologies—communication, computer and cryptographic technology—that together have advanced the manner in which communications have been masked and unmasked throughout history. Appendices offer a useful introduction to cryptology and a short history of the NSA, while a detailed glossary completes the book.

Boone commences his examination from the middle ages, and as the timeline progresses so to does the depth and breadth of his analysis. The shortcomings of this book soon become apparent, however. Whilst initially the emphasis is balanced between encryption and decryption, when the reader reaches the Second World War the focus shifts to Allied decryption achievements against German and Japanese encryption systems. From that point on the Axis states are portrayed as targets, with no analysis of their success (and failures) at attacking Allied cryptographic systems during the war, and the reader could be forgiven for believing that while the Germans and Japanese developed encryption systems, only the Allies invested heavily in decryption. By omitting the other side of the coin Boone lulls the reader into a false sense of security, reminiscent of the Chinese parable of the halberd that could penetrate any shield, and the shield that could defeat any halberd, with the halberd representing the Allies’ decryption effort, and the shield representing the Allies’ encryption systems. David
Alvarez’s *Allied and Axis Signals Intelligence in World War II* (Frank Cass, London 1999) presents a more balanced view for readers interested in the achievements and shortcomings of the major participants in that war.

This approach mirrors much of what is available in common histories on the successes of the Allies’ Ultra and Magic decrypts. Polish break-ins against the famed German Enigma encryption system are not mentioned and the reader could be forgiven for understanding that the latter half of *A Brief History of Cryptology* is a history of the US National Security Agency (actually the topic of Appendix B).

As the timeline progresses further, the emphasis shifts again onto communication and computer technology, at the expense of cryptographic technology. Another problem with the chronological approach is that the information quickly becomes outdated. The rate of change in computing power since 2002—the last entry in the book—has been significant, and their absence given the book’s 2005 publishing date is notable. Nor does *A Brief History of Cryptology* offer insight into more recent, less traditional cryptological challenges posed by non-state entities (such as terrorist groups or the commercial world).

Finally, two appendices offer a useful introduction to cryptology and a short history of the NSA, while a detailed glossary completes the book.

*A Brief History of Cryptology* offers no new insights into what is a very sensitive subject. On the one hand its American-centric outlook suggests that other states have had little to contribute to the world of cryptography other than to provide intelligence targets for the US. On the other hand, reflecting the experience of its author—Boone spent almost 40 years with the US National Security Agency (NSA)—*A Brief History of Cryptology* does not surrender any ‘jewels in the crown’ of what those achievements might be. In other words the emphasis is on history, rather than recent history. Having distilled a large body of public domain information into one volume, *A Brief History of Cryptology* is a useful work rather than a significant one.

NOTES

1. Attributed to a Chinese classic from the State of Chu (841–233BC), in the Chou Dynasty. When the respective characters for halberd and shield are combined, they form the Chinese word for ‘contradiction’. 
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