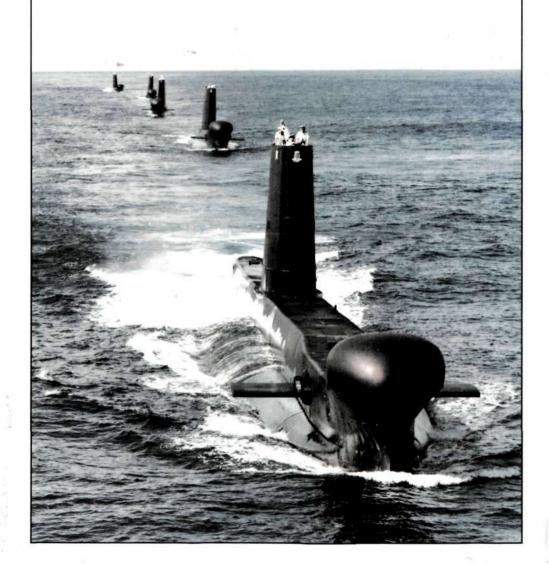
AUSTRALIAN



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Australian Defence Force Journal

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Have a nice flight



Letters to the Editor

Perestroika

Dear Sir.

I have been sending a copy of the *Defence Force Journal* to the Indonesian Air Force Command and Staff College as part of my efforts towards building the relationship between our armed forces. On reading Lieutenant Commander Alan Hinge's article in Issue No 82, 'Perestroika: Strategic Implictions for Australia', however, I wonder at the wisdom of sharing the 'Journal of the Australian Profession of Arms' with professional colleagues in the Services of our close neighbour.

Comment on the main theme of the article I will leave to others more expert on the USSR, but in passing I might say that I thought those 'optimists' who believe the Cold War is finished are now a substantial majority. My main concern is with the section headed 'The Australia — Indonesia Relationship — A Special Case'.

Presumably Alan sees Soviet involvement in this relationship as a special case because he had previously argued that there is a low probability of Soviet economic and ideological penetration into the South West Pacific and South East Asia. Having argued this case though, he draws a long bow in trying to establish a probability for a future close relationship between Indonesia and the USSR. Unfortunately, the case is built on some most speculative predictions, and suspect interpretations of past events.

President Suharto's visit to the USSR in 1989 has been presented in the article as a cause for concern. Surely it is quite acceptable for the leader of a significant non-aligned state to visit Moscow, as it would be for him to visit Washington, Tokyo or Beijing. The fact of the visit does not indicate that Indonesia has abandoned its non-aligned (albeit Westward leaning) policies. Nor does it indicate any reduction of the staunchly anticommunist position of the New Order Government.

However, it is in the string of speculative statements put forth to build the case that Indonesia faces future instability that the argument is weakest. Firstly, it is by no means commonly accepted that the President will step down after his present term. If he should decide to do so however, there is a clearly defined constitutional path to the election of a successor.

The Majelis Permusyawaratan Rakyat will meet to elect a President in 1993, and if President Suharto is not elected his successor will almost certainly be someone who shares with him the New Order concern to maintain stability as a means towards sustaining the climate for national development.

Again, the supposed isolation of Indonesia as a result of strained relations with its neighbours is at the very least an overstatement. ASEAN has been a successful forum for the member states to discuss common interests, and it has helped to keep disputation between its members at a low level. Indeed, taking into account the varied cultural and historical bases of the ASEAN states, they have developed a commendably cooperative and cohesive set of relationships.

To state that Indonesia has a tendency to use military force to exert national power is an exaggeration or distortion of the facts. The examples put forward — Irian Jaya, Confrontation and East Timor — indicate that Indonesia has confined its use of military power to the Archipelago. The only troops it has sent overseas have been members of peace-keeping forces. Moreover, each of the examples cited arose out of problems associated with the end of the colonial era, and hence the conditions in which these actions were taken no longer exist.

One point which I concede is that there has been a disturbingly low level of mutual understanding between ourselves and our near neighbours. This was evident in relation to the East Timor situation after the Australian Prime Minister gave the Indonesian President to understand that Australia would support Indonesia's response to a request for military assistance. It was therefore most difficult for Indonesians to understand why Australia should later criticise Indonesia's use of force.

This of course leads to consideration of the different perceptions of freedom of expression held in our two countries. Indonesia has learnt to live with the way in which Western journalists express opinions which are not always logically argued, and are sometimes insulting in their accusations. Since 1986, it has been possible to convince Indonesian leaders that the Press is beyond the control of the Australian Government, and in fact it is a part of our culture that

the Press should probe and question issues in the public arena. It becomes most difficult though to extend this argument to a journal published by the Department of Defence carrying articles written in the main by Service officers.

My intention here is to point out that we must be more understanding of the cultures of our neighbours. It is all very well to say that they must learn to accept us as we are, but a relationship can only be built on a reciprocal basis. We also must accept our neighbours as they are and have considerations for their conception of responsible expression. To suggest that other people should adopt our form of freedom of expression is cultural impertinence.

Criticism based on sound analysis is a normally accepted part of academic scribblings. My concern with Alan's treatment of the Indonesia/ Australia relationship is that the bases of his arguments are too speculative to be credible, and therefore Indonesians could quite understandably take offence at the way in which they stand accused of being aggressive and prone to being influenced by the USSR.

Having said all that however, in view of my faith in the understanding and forbearance of the Indonesian people, I have forwarded Issue No 82 to the Staff College with a note highlighting the disclaimer that the views are the author's and should not be construed as official opinion or policy.

J.A. Bushell Group Captain

Dear Sir,

I thought LCDR Hinge's article (No 82 May/ June) on Perestroika a particularly incisive piece, providing a good focus on its likely effects in various theatres.

With the benefits of a few months of reading contemporary history — since he penned his article, one could possibly hole some of his arguments but I expect he is already conducting a reappraisal. Effects of such issues as, increased nationalism in the Soviet Republics, Soviet overtures to Japan on the Kurils, US bases in the Philippines post-1991, Indo-Chinese peace talks, Afghan guerilla military successes and UN discussion on East Timor, are some but not all of the recent events which would lead LCDR Hinge to re-evaluate.

Moreover, the Persian Gulf crisis and the attendant possibility that US and Soviet Forces may join in Military action, added to likely Japanese/Soviet negotiations on the Kurils, may fundamentally change his view on the Soviet's penetrability of the Asia-Pacific Basin. Also maybe it's not now so naive (sic) to think that Perestroika heralds the beginning of a post confrontational era. I think he has underestimated the Soviets abilities (and their will) in this area.

I would very much like to see him write again soon and provide another edifying 'tour de horizon'.

> R.M. Hancock Commander

Multiculturalism

Dear Sir.

Bruce Turner's attack on multiculturalism and the participation of ethnic minorities in Australian defence (Letter, *Defence Force Journal* No. 84, Sep/Oct 1990) cannot be allowed to go unchallenged.

He tells us that 'our nation is divided and multiculturalism is divisive' but his evidence consists only of the wild-eyed clap-trap frequently spouted by those conservatives who want to return Australia to a bygone age of monoculturalism. Unfortunately for them, such an age never existed. Australia has been a multi-cultural community, whether we like it or not, since 1788.

He also asks 'what evidence is there that [ethnic minorities] will ever fit in and meld with mainstream Australia let alone help defend Australia and be loyal citizens? In reply one could well ask what evidence is there that they will not (and who or what is 'mainstream Australia' anyway)?

Actually, Bruce, there's plenty of evidence. Did you know, for example, that in proportion with the size of their population, more Torres Strait Islanders served in the army in the Second World War than white Australians? Aborigines also made a significant contribution. Did you know that in 1942, on behalf of Chinese in Australia (both citizens and refugees), the Chinese Legation offered to form a Chinese battalion but that, conforming to its racist 'White Australia Policy', the government rejected the offer? Did you know

that 'Koepangers', 'Javanese', Chinese and Malays served in the Australian forces in the Second World War and that aliens of all types, including enemy aliens, were employed in army labour battalions?

Non-Anglo-Saxon Australians made similar contributions to national defence after the Second World War. My own service in Vietnam brought me into contact with many men whose names reflect their non-Anglo-Saxon origins: Von Kurtz, Juckel, Vassarelli, Salkowski, Yow Yeh, Frankiewicz, Ribic and Scheuermann, to name but a few. I find Bruce Turner's suggestion that these men might somehow have been disloyal quite offensive.

Finally, it seems to me to be silly of Bruce Turner to criticise ethnic minorities for what he claims to be their reluctance to join in the defence of Australia when the ADF itself seems to do much to discourage a truly Australian identity. Why should an Australian of Greek, Italian or Vietnamese origin feel entirely at home in an army whose band insists on dressing up as Scotsmen or Irish Guardsmen?

Robert A. Hall Major

Dear Sir,

I would like to reply to the letter written by Bruce Turner in the *Defence Force Journal*, September/October 1990 issue.

In this letter Mr Turner writes about his views on Reserve Forces playing a larger role in the defence of Australia according to the Wrigley report. Mr Turner talks about multiculturalism and it's effect on the community and on the future of an expanding reserve force. He says 'our nation is divided and multiculturalism is divisive. Our education systems do not promote allegiance and loyalty to Australia nor teach our nations history. How could we rely on military reservists drawn from such a population".

I write this letter principally in reply to the above lines. I am currently serving in the Army Reserve, holding the rank of Bombadier. My unit is based in Belmore, NSW, which is a large multicultural suburb with the majority of the population coming from ethnic backgrounds. About 50 percent of my current unit come from ethnic backgrounds, if not first generation Australians. These are good soldiers with the same spirit, loyalty, enthusiasm that we so called

'true blue aussies', anglo saxon type soldiers display. They are equal to the task and valuable contributors to the future of the Australian Army.

Most of these soldiers enlist into the ARES without the family support that most of us enjoy, often conflicting with family dislikes and beliefs of the Military. Their dedication and spirit are qualities with which all soldiers should have to serve regardless of personal or social circumstances and a fine lesson to all of us. If more people had these views I am sure that the Army Reserve manning levels would be higher. If you find my letter unconvincing I invite you to attend a parade night at your nearest ARES unit and see for yourself the products from a multi-society. The evidence would be parading in front of you.

Any soldier who wears the same uniform I wear is good enough to serve in my Army regardless of race, colour or creed. I understand the basic theme of your letter and agree, but comments like you have made are slanderous, damaging to those soldiers who serve and come from an ethnic background and it could be damaging to future recruiting prospects.

I have no doubt in my mind that a larger Reserve force drawn from the current populace would work as it does now.

> A. Buckingham Bombadier

Mobile Air Power

Dear Sir.

Petty Officer Michael G. Ryan, RAN, is to be congratulated for his article "Mobile Air Power: A Case For Australia" (DFJ No. 84 September/October 1990), which seeks to raise the consciousness of Australians to their need for Defence protection and suggests a beneficial means of providing it. The DFJ is to be commended for being seen as open to articles from all levels of the ADF, also witnessed by Bombadier S.J. Smith's well crafted article on the Light Horse option.

PO Ryan should be heartened to know that Defence is looking at justifications and options for a Helicopter Support Ship (HSS).

I will take up the point on insurance made by PO Ryan to great effect in his conclusions. Insurance is a dirty word to most people, who associate it with disasters, the insurers who subsequently do not deliver on a policy. What most people do not realise is that they can ask for the type of policy which they desire — absolute cover for all circumstances, selective cover for all circumstances, selective cover for some circumstances, slight cover for some circumstances, penalties for claims (Excess), No-Claims Bonuses, premium reductions for extra protection systems, to name a few of the possible benefit options.

In Australia, it seems that we forget these principles with respect to Defence. As a society, we care about Defence but do not seem to really know what we care about (see Capt. J.E. Huston's article "Public Relations — A Way Ahead", also in DFJ 84). For instance, Australians could put in place extra protection against aggression (premium reductions) by correcting social misconceptions (prejudices) about our Asian and South Pacific neighbours. That Australians, and particularly the popular media, often appear unable to grasp this concept - understanding Australia's Asian/Pacific context — is a symptom of a national attitude problem. It is the same attitude problem which causes Australians abroad to talk louder in order to be understood, if English is not the native tongue of the person they are talking to.

Australians could also indicate clearly to the Government the level of Defence protection which they wish to receive. It is the Government the grouping of all members of the Federal Parliament of whatever political persuasion which has the duty under the Constitution to provide for the defence of Australia. The Government is the insurer of Australia's defence, and while the Parliament must bear the responsibility for providing a suitable level of cover, Australians must bear the responsibility for requesting an appropriate level or type of insurance. The current Persian Gulf Crisis is a useful catalyst for such public soul-searching over the Defence of Australia and our society's perceptions of Australia's role in regional affairs.

> P.R. Ellis Lieutenant Commander, RAN HQADF

Multinational Peacekeeping

Dear Sir,

I wish to take issue with Lieutenant Colonel James (Defence Force Journal No 84 on Multinational Peacekeeping Operations) for his unsubstantiated assertion that UNTAG was Australia's least hazardous peacekeeping operation, and for his jaundiced insinuation that UNTAG service did not warrant the conditions of service provided by the Government.

As the Army Operations Room Staff Officer responsible for monitoring the UNTAG mission he would have been well aware of the operational reports dispatched weekly by HQ ASC UNTAG which clearly reported the contingent's hazardous operational environment. Lieutenant Colonel James either suffers from selective memory or has chosen not to report accurately on the ASC UNTAG experience.

To set the record straight, I cite the following situations which occurred during the tour of the second contingent:

- a. For the first time since the Vietnam War, Australian Sappers hand cleared their way into live minefields on seven separate occasions to destroy exposed mines. Similar mines killed several civilians and many animals during the mission.
- b. Field engineers of the contingent destroyed over 5,000 items of unexploded ordnance (UXO) ranging from artillery shells, through RPG rockets to grenades. UXO, a legacy of the 20-year Bush War, posed a major hazard to local inhabitants in the northern provinces and to UNTAG personnel in that area.
- c. On two separate occasions during the November 1989 election, the ASC's Ready Reaction Force was used to disperse rioters who were offering violence to UN election monitors, including Australians. Members of the Australian Electoral Commission who were present verified this on their return.
 - during the lead-up to the election, all members of ASC worked, often well away from their bases, in a security environment which at best could be termed uneasy and on many occasions was definitely hazardous. The deeply divided political factions, which included thousands of demobilised soldiers from both sides, had easy access to weapons including machine guns and grenades. This situation resulted in a series of violent incidents including assassinations and reprisal killings which culminated in the deaths of 11 civilians and the wounding of 50 others in street battles in the northern

town of Oshakati just before the election. Also, as the supervision of the November, 1989 election was UNTAG raison d'etre, I felt that the author should have mentioned that the Australian Contingent's complete and wideranging support was critical to the success of that election and hence the mission — a fact that has been acknowledged at the highest level in UNTAG.

I use these examples to refute Lieutenant Colonel James' assertion that the mission lacked hazards. The first contingent worked under similar trying circumstances and I am sure his article will attract comment from members of that force. Also, over the year-long mission, UNTAG lost 23 of its members killed in road accidents — further proof that service in Namibia was not without hazard. The fact that our soldiers survived the hazards is a tribute to the training standards of the Australian Army and perhaps, a bit of good luck.

John Crocker Colonel Commander 2 ASC UNTAG

Dear Sir,

May I please make a correction to my article on Australian peacekeeping operations which was published in the *Defence Force Journal*, (November 84, Sept/Oct 1990).

The printing gremlins dropped a line from the section on the Australian contribution to the MFO, thereby drastically understating our commitment and undervaluing the RAAF's achievements. The phrase '... eight helicopters and 89 personnel, and a RNZAF detachment of ...' was omitted after the words 'detachment of', in the second sentence of the second paragraph, thereby making the NZ component appear to be the total combined contribution.

N.F. James Lieutenant Colonel



Defence Chief launches Australia Day stamps

The Chief of the Defence Force, General Peter Gration AC OBE, officially launched Australia Post's 1991 Australia Day stamp issue on Thursday January 10.

This year's stamp issue consists of four stamps, each featuring one of the four Australian Ensigns.

And what more appropriate venue for the launch than under the largest flag in Canberra, at Parliament House.

The four stamps are:

43 cents Australian National Flag (of which the Australian Army is the protector)

90 cents Australian White Ensign (reserved for use by the Royal Australian Navy)

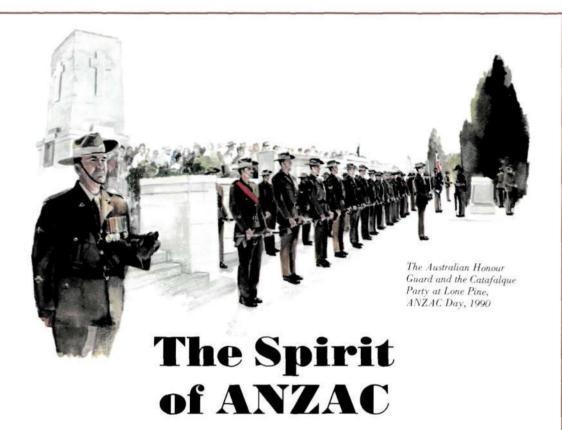
\$1.00 Royal Australian Air Force Ensign (which represents the RAAF)

\$1.20 Australian Red Ensign (flown by Australian registered Merchant ships).

The launch took place in the Mural Hall at Parliament House.







In April 1990, a group of World War I veterans made the historic pilgrimage back to Gallopli to take part in the events marking the 75th Anniversary of the landings at Anzac Cove

The pilgrimage involved the deployment of a Quantas 747 aeroplane especially named 'The Spirit of ANZAC' to carry the veterans and war widows to Gallipoli. The Australian Defence Force provided medical teams to care for the pilgrims as well as an Australian Army Half guard, a military band a Catafalque party and escorts for each veteran.

The Royal Australian Navy was represented by the landing ship HMAS Tobruk, the guided missile destroyer HMAS Sydney and the submarine HMAS Oxley.

It was the biggest overseas movement of civilian and military personnel in the history of our nation.

The Australian Defence Force Journal was there to capture the atmosphere of this emotional event and has produced the book 'The Spirit of ANZAC'. This unique publication is a collection of excellent paintings by Defence artist Jeff Isaacs with the narrative prepared by Michael Tracey.

The Spirit of ANZAC is available from the Australian War Memorial bookshop for \$9.95

The Role of "Blue Water" Navies in Modern Maritime Warfare — How Fares the Medium Power?

By Lieutenant M.L. Bailey, RAN

Introduction

This article aims to examine the roles that modern "blue water" navy can play in warfare short of general conflict. "Blue Water'; navies are the exception in the world and always have been (particularly among the medium powers), but querying the need for them has been a common practice for they are expensive and overtly capable of enforcing the national will. This article will look at what defines a Navy as "blue water" and what such a force is capable of. It will draw from these factors the role such a Navy can play in modern war, with particular reference to the medium maritime power.

The vital quality of any navy is that it is capable of effective action in war, but no navy engages in war for even a large fraction of its life. During peace navies have played an important role in international affairs, and this peacetime role is arguably the greatest benefit a nation gains from investing in any navy, but in particular an ocean going one.

Naval power is but a part of overall national military power, and a navy is but a part of the maritime power of the state, a facet of a greater totality. However, naval power is flexible to an extraordinary degree and operates in a medium quite free of the restrictions placed on land and air power.

The "Blue Water" Navy

To state that navies operate with fewer restrictions than do other military services might sound odd, but it is true. The prevalence of continental states has developed close regulation on the use of land and air power, as all such states are very sensitive to the military elements of national power as expressed on land. This is due to the reality that territory historically changes hands by force. This is not so at sea, for the sea essentially remains the "great

common", despite being increasingly bound by law and economic zone². The sea is still a vast common medium where common usage is the norm and where there is no inviolable territory beyond the twelve mile limit. This fact alone makes seapower inherently more flexible than other forms of military power, for the arena is neutral.

The function of the "blue water" force in this boils down to "sea control", a new term that takes into account the impact of submarines and aircraft since 19393. "Sea control" means dominance of the patches of sea one needs to dominate for the period of time that one needs to dominate them - the vast bulk of sea area remains neutral. Only a "blue water" navy has the ability to do this at the distance and for the time required by a maritime nation. The 1982 Falklands Campaign required this to be done at a distance of 8,000 miles for a period of two months, during which time the Navy had to destroy the enemy air force, defeat the enemy navy, conduct an amphibious landing, maintain a supply line and perform the multiplicity of normal wartime tactical tasks. A "blue water" navy must be able to sustain distant combat with a foe, and this requires what Rear Admiral J.R. Hill has termed "reach". This is what enables navies to operate beyond their national economic zone to protect the vital interests of the state. The main benefit of reach is that it permits the application of a continuum of responses at a distance in response to perceived threats to the national interest. This flexibility of response makes full use of the strategic mobility of ships. Navies are more mobile than base-dependent airforces or armies, which are themselves dependent on sea transport, and naval units are more capable of rapid sustainable deployment as the Gulf crisis has yet again demonstrated.

The end of the great empires has seen a decline in the number of "blue water" navies due to the loss of the vast networks of bases, and indeed to the loss of the colonies themselves. With no empires, nations such as Holland have lost any real need for such a navy.

For others the need has remained because:

The best reason for having an oceangoing navy has always been the extra chance it offers of responding to the unforseen, but oceangoing navies are also needed by governments seeking a wider role in world affairs than their own region affords . . . What oceangoing navies do offer . . . is the chance of distant intervention.⁴

The Roles of "Blue Water" Navies

The main traditional role of the "blue water" navy has always been the policing of trade routes and what is now called the Third World. The lonely cruiser on distant station, not the Home Fleet, was the symbol of the Royal Navy (RN) from the early nineteenth century until 1939. This mission has since been taken over by the United States Navy (USN), which has been uncomfortable with the acceptance of that role forced on it since 1945 by the collapse of the RN.7 One proof of this is the fact that the USN has never built ships for this role, although they came close with Admiral Zumwalt's sea control ship of the 1970's. There is no functional USN equivalent of the pre-war RN cruiser.

The term "blue water navy" itself does not refer to the wartime role of the navy under discussion. It refers to the place of any particular navy within the current modified Mahanian maritime system, and here it is vital to realise that this maritime system is an evolving entity in itself. There has existed a maritime system that was totally at variance with ours. The current maritime system is about 350 years old and is based on the ability of ships to keep the sea for extended periods. That ability is also the basis of the "blue water" concept, and the term itself is predicated on the ability to intervene at distance. In situations short of war that equates to the old police function (and this is another specialised maritime term).

The current roles of oceangoing navies include deterrence, which is a continuum that ranges from minor acts of deterrence like the British despatch of two frigates and a nuclear submarine to deter Argentinian aggression against the Falkland Islands in 19779, to the strategic deterrence function of the ballistic missile submarines.

It should be noted that the "seamless robe" style of deterrence is only within the capacity of the superpowers and larger medium powers. A second major function is sea control as previously discussed. The old term of sea command now tends to be seen as a contradition

in terms, and impossible to boot. Sea use is another role which confers huge advantages upon the nation. It allows one to have the advantage of strategic mobility, to select new axes of attack, to complicate the enemy's defensive function, to maintain ones own territorial integrity, and to allow sustenance for ones own and allied nations and military forces. It allows cheap bulk transport in all its forms, and depends solely on surface shipping.

The parallel of sea use is sea denial. This role aims at making the risks of sea use too high for the enemy, and is particularly attractive to smaller medium powers and small powers. The best examples of sea denial were the Cod Wars of 1958-60, 1972-73, and 1975-76, where the Icelandic use of sea denial was most effective. The final major role of "blue water" navies is that of presence. This may be of two types, a continuous low level presence like the French maritime garrison system, or infrequent visits by strong balanced forces on the British model¹⁰. This is one way that navies are used to achieve national political ends, and it has even been used in wartime by a third power wishing to intervene short of war, US and British operations in the Persian Gulf during the Iran-Iraq War being a recent example.

These are the mechanisms that allow navies to achieve political ends. It is based on the threat of force or the use of limited force, and there exists little in the way of any similar use by land or air forces. At sea the arena is neutral, but this is never the case on land where such operations have much higher risk of provoking war.

The political uses of "blue water" navies are presented by Luttwak as:

- latent suasion to deter a possible enemy,
- latent suasion to support an ally,
- latent suasion to limit an allys action,
- active suasion in all of the above modes.¹¹

Latent suasion is a widespread activity, and "blue water" navies are particularly good at this function when political direction is maintained. The fiasco of the Suez operations in 1956 shows what can happen when the political aims are not defined¹². That this is sometimes the case is due to naval power being the least understood of maritime, land and air power¹³. If one looks at the Formosa Strait operations of 1950, it becomes clear that; "Here again, the peculiar flexibility of naval forces enabled them to play a precisely



The Guided Missile Frigate HMAS Adelaide one of the Royal Australian Navy's long range escort ships

defined role in a manner that has no equivalent on land."14

The Role of the "Blue Water" Navy in War

One difficulty in looking at the roles of the "blue water" navy in modern war is that there has been an evolutionary change in the mechanisms of naval war. Mahan, Corbett, the Colomb brothers, Gorshkov and the rest all looked at seapower through the function of dominance as expressed in general war. Only Admiral R. Castex looked at the part that could be played by an inferior navy¹⁵. This is important because modern weapons systems make classical sea command unachievable: it was a Napoleonic era doctrine that left little scope for the secondary naval power. This was coming under severe challenge even by 1914 as the destruction of the 7th Cruiser Squadron on 22 September, 1914 showed. In the current era the secondary naval power has roles even in the face of very great enemy superiority16, particularly when the superior power is acting under restraining Rules of Engagement (ROE) in low intensity operations. Again, the Iran-Iraq war provides a good example in the Iranian anti-tanker operations and general harrassment of shipping in the face of the overwhelming Western naval superiority. The game can be dangerous though, as the results of *Operation Praying Mantis* proved¹⁷.

Even in this operation, the commander of ComCruDesGru Three was not permitted to engage any and all Iranian warships. His ROE were quite specific. He was to sink an Iranian Saam class frigate and destroy surveillance posts on the Sassan, Sirri and Rahkish oil separation platforms, avoiding unnecessary loss of life in all cases18. This even extended to such actions as warning the crew of the FAC(M)19 Joshan that she was about to be sunk, and to abandon ship. This was done after repeated warnings that she was standing into danger and should leave the area; in the event she ignored all warnings, attacked with her Harpoon missiles and was promptly sunk for her pains²⁰. The operation was conducted with total success to achieve its aims with no damage to other than the intended targets in an environment crammed with innocent neutrals. This type of punitive operation could not have been conducted by any other forces than naval ones as the degree of discrimination involved allowed no room for error. An excellent example of this was the identification of a Soviet Sovremennyy class destroyer as a Saam class frigate by an aircraft²¹. This vessel would probably have been attacked in a purely airforce operation, but was positively identified before any attack took place. That this was easily possible is a good indication of the flexibility of naval forces in this type of operation.

The operations in the Persian Gulf in April, 1988 can be classified as being at the upper end of the low intensity warfare area. There are two other main spectrums to consider, these being high intensity operations or limited war at sea, and general war at sea. The latter will not be examined in any detail, except to say that planning for such a war must be on the basis of a protracted war. To plan for a short war at sea is to plan for defeat for any non-continental power, and for continental powers too in most case s²².

The modern face of war is currently expressed in the form of low intensity operations for maritime powers — although events in the Gulf might extend that particular case up to limited war by the time of printing. By definition the national aim in such operations is likely to be quite narrow and carefully circumscribed by either political direction or by law. That this is so is due to the aim of one side revolving around the protection of the status quo23. This has been seen in disputes as different as the Persian Gulf War, the Chilean-Argentine Beagle Channel dispute and the right of innocent passage exercises conducted every few years by the USN off Sevastopol and Petrovpavlovsk. The use of violence is usually tightly controlled, and is mostly expressed as rule of the road games, close quarters situations and deliberate glancing collision at most²⁴. Sometimes these minor confrontations are even followed by goodwill visits.

The period 1946 to 1986 saw a total of over 130 published low intensity operations²⁵. These proved to be a problem for the USN in particular, as that navy had been restructured to conduct high intensity war after 1945. They got two limited wars instead, and had to take over the RN's old police function as well. This caused much anguished debate in USN circles, and it was not until the Reagan administration that positive steps were taken to build up forces to deal cost effectively with these roles. The reactivation of

the battleships and use of older LPH's²⁶ in the distant police role has proven to be most effective, taking much of the strain off the fleet carriers. The use of these ships (the battleships excepted) is only a stopgap measure, however, and the USN is currently looking again at purpose built vessels for this police function.

That there is a role for "blue water" naval forces in low intensity war can be seen to be so from all that has been discussed thus far. Indeed an examination of the maritime operations conducted from 1946 to 1986 shows that "blue water" forces played a major role in most of them.

The same is true of the limited wars fought since 1945. These are sometimes called "high intensity operations", and are defined as "active, organised hostilities involving on both sides fleet units and/or aircraft and the use of major weapons"27. They are also subject to strictly limited political aims, despite usually being couched in military terms such as: "blockade Biafra" (1968), "contain enemy FAC(M) and ensure the safe passage of shipping to Israeli ports" (1973), "occupy and hold Northern Cyprus" (1974), "recapture the Falkland Islands" (1982). The aims are limited by ROE, politics and the effects upon larger powers²⁸. Low and high intensity operations tend to merge together at the upper and lower ends of their respective spectrums, but limited wars have tended to share one thing in common. They are dependent upon the relatively unhindered use of the sea by at least one and usually both participants. This was certainly the case in the Vietnam conflicts. The French were totally dependent upon sea transport as were the Americans who came after them. The Democratic Republic of Viet-Nam was also dependent upon sea transport during the Second Indochina war, where the use of the communist bloc shipping provided an interesting use of the latent suasion in the limiting mode. Interference with this shipping might have provoked the Soviet "blue water" fleet to escort such ships, leading to an unwanted confrontation. It was politically easier to avoid that possibility, even at the cost of massive aircraft losses to Soviet supplied missiles and anti-aircraft artillery. The Korean conflict provides a similar example, with the UN forces being totally dependent on sea transport. Indeed, in the earlier stages of that war, the ground forces were heavily dependent on carrier aircraft and naval gunfire for direct support as well.

There has been only one example of a purely naval limited war since 1945. That was of course

the Falklands campaign of 1982, and the role of the "blue water" navy in that campaign was such that the entire operation would have been out of the question without the naval involvement on both sides. The campaign illustrates the full spectrum of responses possible with a "blue water" navy from the symbolic presence function of a single naval auxiliary on distant station through the inflexibility of submarines to the concentrated power and force projection abilities of a balanced naval expeditionary force. The full range of response functions was also illustrated. These ranged from the initial threat of sailing a force as a diplomatic tool right through to a full blooded limited war²⁹.

The role of a "blue water" navy in conflict short of general war cannot be seriously queried after the experiences of the Falklands campaign. The gist of the campaign is too well known to be worth covering here, but the main achievements do bear a brief mention. The main one is that the British did not possess the fleet they needed for the power projection role, their fleet was optimised for anti-submarine work in the North Atlantic and Western Approaches of the UK. Nevertheless, they were able to adjust to their unexpected role by improvisation and the use of obsolete tactics, although these did cost them all of their combatant ship losses. This enabled them to conduct a four part operation which achieved the limited task set for them by their government. The first part was to project maritime force across 103 degrees of latitude with the intention and ability to maintain it there indefinitely. The second was to obtain local sea control by force of arms and to maintain it for the duration of the conflict. This entailed the destruction or neutralisation of the Argentine naval and air forces. The third task was the transport and landing of a large land force to retake the territory in dispute, and the final and most onerous task was the maintenance of a supply line for all of the forces involved. It is instructive to note that the only active operation conducted that did not directly involve the naval forces were the two "Black Buck" raids of 1 and 4 May, 1982 and the anti-radar attack on 3 June, 198230. These attacks achieved one bomb hit on the Port Stanley airfield runway and damage to one Skyguard radar and one *Puncara* at the price of twelve bomber and thirty six tanker sorties. It is debateable if the game was worth the candle in view of the resources expended. In any case

even the fuel used in these attacks had been shipped to Ascension Island by sea.

There are some major differences involved in sea combat. The enemy can simply refuse combat in a way not possible on land by removing his fleet from play³¹, as the Argentine Government did after the loss of the *General Belgrano* and the failuure of the *Vienticinco de Mayo's* airstrikes on 2 and 3 May, 1982³². These differences are just that though, and make no difference to the overall national use of maritime power.

Australia

The Australian place in this spectrum is very interesting. Australia seems to fall into the grey zone between small and medium naval power status. The argument could go either way, particularly as Australia lost the traditional "balanced fleet" nature of the larger medium powers in 1982. This does not mean that Australia is by definition a small maritime power because medium power status depends both on force capability and the ability to operate at a distance from home. The RAN has a longstanding and well practised ability to achieve the necessary reach, and lack of such ability is currently what seems to deny medium power maritime status to the Peoples Liberation Army (Navy).

The largest naval force cannot attain medium power status if it never ventures beyond its own coasts. On this basis the RAN does seem to qualify the nation as a medium maritime power. The point will remain arguable, but Australia would seem to be the smallest power that can be classified as a medium power in this regard.

Conclusion

Maritime power as expressed by the "blue water" navy does have a significant role to play in modern warfare even in cases where there is, as in Vietnam, no real conflict at sea. The functions of such power do not end when the fighting stops as even the USN has derived much of its justification from limited war and "paramilitary" roles³³. These functions and roles have been challenged persistently since 1945 by air power chauvenists and politicians in particular, who continue to do so despite a dismal record of being wrong 100% of the time so far, as Admiral Hill so peevishly puts it. This is not

to say that there are not some valid criticisms to be made of "blue water" navies. They are fairly slow to act because ships are slow when compared to aircraft, and to modern opinion so demanding to getting it done now. "Blue Water" forces are also very expensive, so much so that even the USN has difficulty in maintaining the full range of modern resources required by that nation.

The main objections to "blue water" navies are not usually couched in these terms. They tend to fall still into four areas. The first is that seapower is too slow acting in an era when war will be a short lived phenominon, so it will not have the time to be effective. The second is that new weapons have deprived surface ships of the ability to survive, let alone function at sea. The third category is that sea control is irrelevant as modern communication methods enable a nation to obtain its needs without using the sea at all³⁴, and the fourth is the old one about airpower being able to replace seapower at less cost.

In no case so far has any of these points been proven to be correct. The historical and operational evidence indicates that these objections are not supportable, and the current (December 1990) operations against Iraq reinforce this view.

"Blue Water" navies do have a role in modern warfare and will continue to do so while national strategic realities demand a wide ranging sustainable responsiveness to a variety of influences at a distance from the homeland. In these strategic circumstances the "blue water "navy currently remains the most politically acceptable and economic means of applying the national will.

NOTES

- Hill, Rear Admiral J.R., Maritime Strategy for Medium Powers, Croom Helm, London, 1986, p. 30.
- 2. ibid., p. 37.
- Till, G., Maritime Strategy in the Nuclear Age, McMillan, London, 1982, p. 189.
- Martin, L.W., The Sea in Modern Strategy, Chatto and Windus, London, 1967, p. 88.
- Cable, Sir J., Navies in Violent Peace, McMillan, London, 1989, p. 105.
- 6. ibid., p. 111.
- Friedman, N., The Postwar Naval Revolution, Conway, London, 186, p. 11.
- Guilmartin, J.F., Gunpowder and Galleys: Changing Technology and Mediterranean Warfare at Sea in the Sixteenth Century, C.U.P., 1974, pp. 2-3.
- 9. Hill, op. cit., p. 118.
- 10. ibid, pp. 81-82.

- Luttwak, E.N., The Political Uses of Seapower, John Hopkins University, Boston, 1974, pp. 3-5.
- Simpson, B.M., (ed.), War, Strategy and Maritime Power, Rutgers University Press, New Brunswick, 1977, p. 228.
- 13. Luttwak, op.cit., p. 13.
- 14. ibid., p. 37.
- 15. Hill, op.cit., p. 35.
- 16. ibid.
- Perkins, Captain J.B., "Operation Praying Mantis", in, United States Naval Institute Proceedings., 115/5/1035, May 1989, pp. 66-70.
- 18. ibid., p. 68.
- 19. Fast Attack Craft (Missile).
- 20. Perkis, op.cit., p. 69.
- 21. ibid.
- 22. Hill, op.cit., p. 147.
- 23. ibid., p. 112.
- 24. ibid., p. 118.
- 25. ibid., p. 130.
- Helicopter Assault Ship.
- 27. Hill, op.cit., p. 132.
- 28. ibid., p. 133.
- 29. Cable, op.cit., pp. 25-26.
- Ethell, J., and Price, A., Air War South Atlantic, Sidgewick and Jackson, 1983, p. 8.
- Corbett, Sir J.S., Some Principles of Maritime Strategy, United States Naval Institute Press, Annapolis, 1988, p. 156.
- Brown, D., The Royal Navy in the Falklands War, Leo Cooper, 1987, pp. 131-139.
- 33. Martin, op.cit., p. 13.
- 34. Till, op.cit., p. 181.
- Friedman, N., "Shades of 1949", in, United States Naval Institute Proceedings, 116/6/1048, June 1990, p. 106.

BIBLIOGRAPHY

Booth, K., "Foreign Policies at Risk: Some Problems of Managing Naval Power", in, LCDR F.C. Rouse, (ed.), To use the Sea: Readings in Seapower and Maritime Affairs, United States Naval Institute, Annapolis, 1977, pp. 60-67.

Brown, D., The Royal Navy in the Falklands War, Leo Cooper, London, 1987.

Bull, H., "Sea Power and Political Influence", in J. Alford, (ed.), Sea Power and Influence, Gower and Allenheld Osmund, Montclair, 1980, pp. 3-11.

Cable, Sir J., Navies in Violent Peace, McMillan, London,

Corbett, Sir J.S., Some Principles of Maritime Strategy, United States Naval Institute Press, Annapolis, 1988.

Crowe, Admiral W., "Western Strategy and Naval Missions Approaching the Twenty-First Century", in, J.L. George, (ed.), *Problems of Seapower as we Approach the Twenty-First Century*, American Enterprise Institute, Washington 1978. pp. 92-99.

Ethell, J., and Price, A., Air War South Atlantic, Sidgewick and Jackson, 1983.

Friedman, N., "Shades of 1949", in, *United States Naval Institute Proceedings*, 116/6/1048, June 1990, p. 106.

Friedman, N., The Postwar Naval Revolution, Conway, London, 1986.

Gough, B.M., "Maritime Strategy: The Legacies of Mahan and Corbett as Philosophers of Sea Power", in, *RUSI Journal*, Winter 1988, pp. 55-62.



HMA Ships Brisbane, Adelaide, Success, Darwin and Sydney during blockade duties in the Gulf. (December 1990)

Guilmartin, Gunpowder and Galleys: Changing Technology and Mediterranean Warfare at Sea in the Sixteenth Century, C.U.P., Cambridge, 1974.

Hill, Rear Admiral J.R., Maritime Strategy for Medium Powers, Croom Helm, London, 1986.

Luttwak, E.N., *The Political Uses of Seapower*, John Hopkins University Press, Boston, 1974.

Martin, L.W., The Sea in Modern Strategy, Chatto and Windus, London, 1967.

Modelski, G., and Thompson, W.R., Seapower in Global Politics, 1494-1993, MacMillan, London, 1988.

Perkins, Captain J.B., "Operation Praying Mantis", in, *United States Naval Institute Proceedings*, 115/5/1035, May 1989, Annapolis, pp. 66-70.

Rohwer, J., Superpower Confrontation on the Seas: Naval

Developments and Strategy Since 1945, Sage, London, 1975. Ruhe, Captain W.J., "Seapower in the Seventies", in LCDR F.C. Rouse, (ed.), To Use the Sea: Readings in Seapower and Maritime Affairs, United States Naval Institute, Annapolis, 1977, pp. 25-30.

Simpson, B.M., (ed.), War, Strategy, and Maritime Power, Rutgers University Press, New Brunswick, 1977.

Till, G., Maritime Strategy in the Nuclear Age, MacMillan, London, 1982.

Tritten, J.J., "Is Naval Warfare Unique?", in, *The Journal of Strategic Studies*, 12:4, December 1989, pp. 494-507.

Zumwalt, Admiral E.W., "High-Low", in, LCDR F.C. Rouse, (ed.), To Use the Sea: Readings in Seapower and Maritime Affairs, United States Naval Institute, Annapolis, 1977, pp. 191-201.

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Why Study the Classical Air Power Theorists?

By Wing Commander G.W. Waters, RAAF

In the defence of Australia, priority is given Lto the ability of the Australian Defence Force to mount and sustain operations which are capable of responding 'effectively to attacks within our area of direct military interest. ... This area includes Australia, its territories and proximate ocean areas, Indonesia, Papua New Guinea, New Zealand and other nearby countries of the South-West Pacific1'. For the Royal Australian Air Force (RAAF), emphasis is placed on surveillance of the air and sea approaches to Australia, on air defence, and on maritime air operations. The RAAF, in conducting these and other operations such as strategic strike and air transport, relies on the accumulation of technical and tactical skills at the working level which have been refined over many years.

Whilst the working level skills of the RAAF have been proven time and time again, both in war and peacetime, the conceptual skills have been found somewhat wanting. Australia, like many other nations, has wrestled with the problem during its 69 years of existence of formulating a comprehensive philosophy or doctrine for the employment of air power. That it has finally developed an air power doctrine which is unique to Australia is testimony to the foresight of the RAAF's current leaders.

Air power doctrine is based on a body of central beliefs about aerial warfare that provides a guide for combat. Whilst being authoritative, that doctrine is only a guide and does require judgement in its use. Air power doctrine can be viewed as comprising certain fundamental principles which are based on experience, and innovative ideas for the future. Experience provides the enduring foundation for doctrine, and innovation (encompassing continuous change) provides the dynamism and direction 2. In developing its air power doctrine, the RAAF has addressed such basic features as the primacy of control of the air, the overriding importance of the unity of air power, the crucial balance between offence and defence, and the use of air power as a deterrent, all couched within the Australian Government's requirements for defence self-reliance.

The theories of Giulio Douhet, Hugh Trenchard and Billy Mitchell, as three of the leading classical air power theorists, helped to provide the conceptual foundation from which these basic features of air power were drawn. The fundamental principles for the employment of air power which tend to be enduring are derived from experience, as articulated by Kavanagh and Schubert. However, at the time the classical air power theorists postulated their ideas, (just after World War I), little experience had been gained from the use of the air for military purposes. These theories actually preceded the experience that was to be gained from applying air power across the full spectrum of its roles. Once air power had been used to its full extent in conflict. the experience gained was then able to be coupled with the theory, and thus provide the basis for air power doctrines. As times have changed and employment doctrines have been revised, nations have still found it necessary to step back in time and examine the theories and doctrines that prevailed in the past. This is not likely to change in the future. Moreover, any examination of these theories and doctrines must consider the time and context in which they are written, and the particular circumstances which existed.

As Samuel Huntington argues, understanding can only come from simplification and the ordering of reality. Theory, through its necessary abstraction, is one proven way of simplifying the real world such that man may derive from distilled lessons, a broad framework for applying that understanding in his contemporary world³.

It is probably because air power has had such a rapid rate of development forced upon it by technology, and because the eye-catching exploits of the practitioners of air power have so captured the imagination of others, that the importance of classical air power theory has been somewhat obscured.

Additionally, the spectrum of uses of air power is quite diverse-from total independent organisation and action, to co-operation with surface combat forces where the organisation of air power assets may be subsumed within those of the surface forces.

These classical theories of air power should not be studied as laws with universal relevance. They do have to be modified to allow for circumstances which may prevail at the time. There is also a need to continually study them because, as times change, the degree of relevance will also change. Moreover, because the classical theorists were more concerned with developing theories specific to their respective nations, not one of them produced a universal theory based upon community-accepted principles. Therefore, each theorist needs to be studied in his own right, so a complete picture of air power theory can be developed. It would be folly for any nation to disregard theories and lessons from the past that could help it in time of future conflict.

Douhet (1869-1930). Trenchard (1873-1956), and Mitchell (1879-1936) all held the conviction that a nation's will and capacity to wage war could best be subjugated through the application of offensive air power. They also believed that the requisite level of air power could only be applied by an independent air force. Subsequent air conflicts have confirmed some of the ideas of the theorists on the one hand, yet quite noticeably dispelled others as fallacy. As stated earlier, any study of these theorists must bear in mind the time and context in which they postulated their ideas.

That each was driven by his own national view of history, geography, economics, politics, science, technology, psychology, society and military affairs explains why these three did not always agree, particularly on the military objectives of air attack. However, at the time, they brought a new perspective to military strategy and the organisation of a nation's defence force and provided the catalyst for nations to develop their own doctrines for exploiting the air. Therefore, the classical theories of air power and the unique circumstances surrounding a particular nation may be seen to act upon each other to provide doctrines for the employment of air power by that nation. A natural progression would see such doctrines firstly evaluated, then proven valid, and finally implemented as far as possible and in Australia's case, implemented within the context of joint operations.

As Eugene Emme states: 'The classical theories of air warfare appear of particular usefulness as intellectual touchstones for appreciating the nature and conduct of warfare in the present day⁴'. An appreciation of these theories will provide air commanders with the avenue for questioning their own logic and decision-making during planning and actual aerial combat. Whilst such

an appreciation of air power theory will provide a better understanding of war in the air, mastering the art of aerial warfare requires a depth of knowledge far beyond mere theory. This is where doctrine, which also embraces innovation, again as articulated by Kavanagh and Schubert, comes to the fore. Thus, the classical air power theorists are indeed relevant and important in any historical examination of air power. As a simple illustration, a brief comparative analysis is presented of the theories espoused by Douhet, Trenchard and Mitchell.

Douhet's theories, based on the need for Italy to use a small ground force to defend her northern frontier and an air force to conduct bomber offensives, were predicted on a belief that the will of a nation could be destoyed if its population and production centres were attacked. He believed that cities could be destroyed easily, that bombers would always get through, and that future wars would be shorter and would result in fewer casualties than was evidenced in World War I.

Douhet recognised the potential of using the air and deduced that long-range bombers offered either the best deterrence to war, or the quickest way to win a war once one had started. Above all else, he emphasised the need to gain 'command of the air'.

Most notably, Douhet did not foresee that developments in air defences would proceed apace with developments in bomber aircraft. He also over-estimated the impact that bombing would have on national morale and incorrectly assessed the degree of vulnerability of cities to strategic bombing.

Trenchard believed that the best way to win a war was to break down an enemy's resistance. The use of air power offered a most successful means of doing so — by attacking centres of production, transportation and communication. He too believed that an air force would first need to gain 'air superiority'. Unlike Douhet, Trenchard believed that indiscriminate bombing of cities was improper, but attacks on legitimate military targets seemed proper, even if such attacks caused incidental loss of civilian life and destruction of civilian property.

Trenchard's theories for generating a state of panic in a population in a humane and legally acceptable manner were not proved in World War II, because the precision bombing he hoped for could not be achieved. Instead, the RAF, because of enemy air defences, was forced to adopt a

strategy of night area bombing, which in essence appeared to be the indiscriminate bombing of cities which Trenchard had earlier rejected.

Mitchell differed somewhat from Douhet and Trenchard, in that he believed air power could be used to destroy enemy surface combat forces. He also believed in the importance of strategic bombing, but saw a separate need for pursuit aircraft to gain control of the air. Mitchell believed that a bomber formation should attack selected industrial centres only to destroy an enemy's methods of war production and pursuit aircraft should attack enemy aircraft as they launched to intercept the bomber formation.

Mitchell too failed to conceive the effectiveness that Anti-Aircraft Artillery and Surface-to-Air Missile systems were to achieve. More significantly, his belief in air-to-air combat was found wanting in practice because it ultimately became a war of attrition. Air forces found it more effective to attack enemy aircraft on the ground.

Despite the many, yet subtle, differences between the three theorists, the similarities are quite striking. All emphasised the importance of strategic bombing, of the need to avoid the 'trench warfare' so characteristic of World War I, of the need for an independent air force, and that the offensive use of air power was the best strategy. Douhet argued for broad urban attacks to destroy national morale, whereas Trenchard argued for attacks only on the enemy's strategic war effort, and to avoid involvement with navies and armies. Mitchell too argued for selective strategic targeting, but saw the need for the tactical application of air power in surface battles.

Most assuredly, no nation has readily accepted any one of these three air power theorist's views, although most nations did recognise the need to create an independent air force capable of performing unique missions that could not be achieved by surface combat forces. Additionally, most nations used these early theories as the foundation for their knowledge about air warfare, until experience was able to provide embellishments as necessary, even to the extent of replacing concepts that were found wanting. The experiences of World War II (1939-45), Korea (1950-54), Malaya (1958-60), Vietnam (1965-73), the India-Pakistan war in 1965, the Arab Israeli wars of 1967 and 1973, the Falklands war of 1982, and the American raid on Libya in 1986 have all added to the body of theory about how air power should be employed in conflict.

To passively ignore the early theorists or to dismiss them as totally irrelevant is tantamount to dismissing the historical lessons of aerial warfare. The study of these three and other early theorists of air power should be as actively pursued at Service staff colleges and academic institutions as are the works of the better known strategists such as Jomini, Clausewitz and Mahan, to name but a few. Moreover, the study of air power for future conflict has almost always involved contemporary writers who themselves have, at some stage, had to study the concepts propounded by the classical air power theorists. There is therefore, sound logic and established precedent for the continued study of classical air power theory, and for that matter, for study into all subsequent theories or modifications to that theory, all of which have helped to build the air power doctrine of today.

NOTES

- The Defence of Australia 1987. Australian Government Publishing Service, Canberra, 1987, p. 2.
- Kavanagh B, and Schubert D: The RAAF Writes Its Doctrine, Defence Force Journal, March/April 1989, n. 14.
- Huntington S: The Soldier and the State. Harvard University Press, Cambridge, Mass., 1957, p. 1.
- Emme, Eugene: The Impact of Air Power, D. Van Nostrand Co Inc, Princeton, New Jersey, 1959, p. 158.

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The Law of Armed Conflict; Definition, Sources, History

By Lieutenant Colonel P.M. Boyd, AALC

Introduction

In March, 1986 the Australian Government announced its intention to ratify the two 1977 Protocols Additional to the Geneva Conventions of 12 August, 1949. A Bill to amend the Geneva Conventions Act, which would allow ratification of Protocol I, was introduced into the House of Representatives on 9 March 1989. The Shadow Attorney General indicated four broad reasons for opposing the Bill:

- the principal provisions of the Protocol were ambiguous in substance;
- the provisions would limit the effectiveness of the ADF severely;
- members of the ADF would be in greater danger because of the provisions; and
- d. the countries which have ratified the Protocol are not immediately identifiable as Australian allies, or even in our region, and the United States has clearly declined to ratify Protocol I.

The Attorney General expressed his surprise at the position adopted by the Opposition but declined to debate the issues. He sought bipartisan support. Debate was adjourned.

The Bill was introduced into the Senate on 30 August, 1989 by the Australian Democrats stimulate debate on the Protocol. The election in March, 1990 meant that the Bill lapsed.

The Bill in similar form was introduced in the House of Representatives on 22 August, 1990. The Opposition on this occasion simply sought a copy of any Declarations of Understanding or Reservations that the Government may be considering.

Additional Protocol II does not require legislative action prior to ratification but it is unlikely that the Government will ratify one without the other in the short term.

The purpose of this article is to provide an overview of the development of the law of armed conflict so that the significance of the Protocols may more easily be understood. It is substantially based on an introductory chapter to a law of

armed conflict manual presently being developed within Defence in consultation with the United States of America, Canada, the United Kingdom and New Zealand.

SECTION 1 — DEFINITION AND SOURCES

Definition of Law of Armed Conflict

Public international law is the body of the law which governs relations between states. Public international law, for our purposes, has two primary components, the law of armed conflict which, considered in the broadest sense, is concerned both with when states may resort to armed conflict and how they may conduct such conflicts, and the law of peace. This article is concerned primarily with the law of armed conflict in the narrow sense, that is, with the body of law which governs the conduct of states when they are engaged in an armed conflict It is also concerned to an extent with internal conflicts when such conflicts are of an intensity sufficient to come within the scope of international law.

Purpose of Law and Armed Conflict

The purposes of the law of armed conflict are to protect both combatants and non-combatants from unnecessary suffering, to safeguard certain fundamental human rights of persons who fall into the hands of an enemy, particularly prisoners of war, the wounded and sick, and civilians, and to facilitate the restoration of peace. History clearly indicates wars do not last forever. The degeneration of conflicts into brutality and savagery will inevitably hinder the restoration of peace and friendly relations.

Components of Law and Armed Conflict

The law of armed conflict is traditionally divided into two components or streams, each named after the city where most of the relevant agreements were devised, the law of The Hague and the law of Geneva. The law of The Hague is concerned essentially with how military operations are conducted, with the methods and means of combat. The law of Geneva is concerned with the protection of persons not involved in

a conflict, such as civilians, prisoners of war and the sick and wounded, against the effects of war. Generally speaking, at any given moment of time, the law of Geneva has been both a more developed and less contentious body of law than the law of The Hague. In recent years, since 1977 Additional Protocol I to the Geneva Conventions of 1949 was drafted, there has been a tendency for the two bodies of law to merge as this Protocol, linked to the Geneva Conventions, also deals with methods and means of combat.

Sources of Law of Armed Conflict

The basic sources of the law of armed conflict are treaties and custom. Simply put, treaties are agreements of whatever name concluded by states whereby they accept a legal obligation to do or not do something. One can determine whether or not a state is bound by a treaty simply by determining whether or not it is a party to the treaty. Custom is general state practice accepted as law. The elements of custom are a generalised repetition of similar act by competent state authorities (usage) and a sentiment that such acts are juridicially necessary to maintain and develop international relations. The existence of custom is dependent upon general agreement, not unanimous agreement.

SECTION 2 — EARLY HISTORY OF LAW OF ARMED CONFLICT

History Before Treaty of Westphalia (1648)

The concept of imposing rules on the conduct of warfare appears to have emerged in the Middle Ages as a result of the combined influences of Christianity and chivalry.

In fuedal times it was sufficient to a great extent to rely upon a knight's sense of honour. Although there was no generally accepted written law as such, the feudal knights were aware of what they knew as "the laws of arms", a customary code of chivalry that controlled their affairs and which was enforced or supervised by arbitrators specially appointed or, in the case of England and France, by Courts of Chivalry. The rules of chivalry, however, were not of general application. They only regulated the behaviour of knights, and breaches could be tried by any commander, regardless of nationality. The rules did not apply to common soldiers. In 1307 special military courts were trying allegations of breach

of parole. In 1370, at the siege of Limoges, when the English commander had issued orders that no quarter was to be given, three French knights who had fought gallantly and had been captured appealed to John of Gaunt and the Earl of Cambridge: "My lords, we are yours: you have vanquished us. Act therefore to the law of arms," and they were treated as prisoners and their lives spared. In 1474 Peter of Hagenbach was tried by a tribunal made up of representatives of the Allied towns for having administered occupied territories in a fashion that was contrary to the laws of God and of man and was executed.

While the laws of chivalry only applied to knights, all military commanders had 'rights of justice', over their own men, and as early as the reign of Richard III in 1356, clear orders were issued delimiting these powers. This process was facilitated by the early fifteenth century when all men-at-arms had to be included in an official muster, subject to a disciplinary code, including roles with regard, for example, to the taking and distribution of booty.4 Practice was so well established by Elizabeth's day that Shakespeare has the Welsh captain Fluellen say in Henry V "Kill the poys and the luggage! 'tis expressly against the law of war or arms."5 By the seventeenth century England had a full system of Articles of War⁶ regulating the behaviour of the armed forces, forbidding, among other things, marauding of the countryside, individual acts against the enemy without authorisation from a superior, private taking or keeping of booty, or private detention of an enemy prisoner.

During the 100 Years War between England and France it was possible to refer to querre mortelle, which was a war to the death, to bellum hostile, which was a war between Christian princes and in which prisoners could ransom themselves, to querre querriable, which was fought in accordance with the feudal rules of chivalry, and to the truce, which indicated a continuation of an armed conflict and not the commencement of a new one. Each of these had its own rules, which were rules of honour rather than laws of principles of humanitarianism. In such conflicts, unless it was done in which no quarter was to be given, and this was indicated by the raising of a red pennant, prisoners and others, e.g., heralds, enjoying immunity carried a white wand or even a piece of white paper in their head-dress, and prisoners were frequently allowed to move freely under safe-conducts which often enabled them to be employed as messengers.

At that time, the capture of cities was of major importance. This could be done by way of an instrument of surrender or by siege and assault. If the surrender was effected by agreement, inhabitants were treated in accordance with its terms. When a city was taken by assault following a seige, there were no legal restrictions concerning the treatment of inhabitants, although churchmen were often spared. The commander of the besieging forces often instructed his forces not to harm the women and children.

Until after the Thirty Year War, the natural condition among the European powers was one of war rather than peace, and the early writings on the laws of nations were primarily concerned with describing the law of war, the relations between states during such periods, and the duties of soldiers, rather than with the relations that would exist during peacetime. In fact, most of the early classical writings, if not dealing with military as such, were given such titles as 'Concerning the Law of War and of Peace'.'

Through the Middle Ages and until the end of the seventeenth century a distinction was made between just and unjust wars, and almost any measures, subject to the minimum consideration for humanity, were permissible against those engaged in an unjust war. However, with the tendency towards inter-state wars, it became the rule that every war fought by a Christian prince was in fact a just war so that the basic principles of Christian behaviour came to be applied in all conflicts between such princes.

History from Treaty of Westphalia to Mid-Nineteenth Century

By the time the Peace of Westphalia, 1648, which ended the Thirty Years' War and marked the beginning of the nation-state system, the nature of the relations between fighting men had changed. War was no longer a matter of personal relations between commanders, with the fighting man entering a personal contract of service, or with the prisoner being in a master-servant relation to his captor. War had become a matter between sovereigns only, and for a legally recognised armed conflict to exist there had to be a hostile contention by means of armed forces carried on between states.

From the time of Westphalia, through the eighteenth and into the nineteenth century, scholars were writing texts of what they considered to be the rules regulating the conduct of armed conflict. These statements were,

however, personal in character, even though they purposed to be reflective of what states did in fact do, or what they were considered obliged to do.

The first attempt to draw up a binding code for the conduct of an armed force was that of Professor Francis Lieber of the United States, which code was embodied as law by order of President Lincoln in 1863.8 The Lieber code, though only effective for the United States land forces, was considered as being in accord with the practices regarded by the principal European powers as binding upon their own forces in time of conflict.

The rules and principles governing European warfare were not to be found in any agreed international document. Instead, they had developed over the centuries, were partly applications of what had appeared in the texts of writers like Grotius, and in many instances predated those writings and were the basis for them. Since these principles did not appear in any agreements, but were nevertheless expressive of what states regarded as binding declarations of law, they constitute part of what is generally known as customary international law.

SECTION 3 — MODERN HISTORY

Declaration of St Petersburgh (1868)

The first inter-state agreement to restrain the undesirable effects of armed conflict was drawn up at St Petersburg in 18689 and renounced the use of any projectile weighing less than 400 grammes, which was either explosive or charged with fulminating or inflammable substances. From the point of view of the development or the purpose of the law of armed conflict, what is more important than the content of the Declaration of St Petersburg is the statement adopted as being the reason for its promulgation:

"... the progress of civilisation should have the effect of alleviating as much as possible the calamities of war;

the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy;

for this purpose it is sufficient to disable the greatest possible number of men;

this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable; and

the employment of such arms would, therefore, be contrary to the laws of humanity."

Origins of The Law of Geneva

The humanitarian expression embodied in the Declaration of St Petersburg had already been responsible for developments on a non-state level which had led to states undertaking legal obligations among themselves. The sufferings of the sick and wounded during the Battle of Solferino in 1859 had led Henri Dunant, a Swiss, to advocate the establishment of an international non-governmental movement devoted to their care. Out of this there ensued the International Red Cross movement in 1863.

In 1864, at the invitation of the Swiss Government, a conference was held at Geneva which drew up the first Convention for the Amelioration of the Condition of the Wounded in Armies in the Field. This was amended or revised by later Geneva Conventions of 1949. 10. These agreements constitute what is known as the Geneva Law with regard to armed conflict. This Geneva Law constitutes a body of humanitarian law concerned with the treatment and protection of those who are *hors do combat*, 11 civilians or otherwise exempt from treatment as combatants.

Origins of The Law of The Hague

The law with regard to means and methods of conducting actual military operations in armed conflict is generally known as the Law of The Hague. This law had its origin in the conference of 15 European states called to Brussels in 1874 at the invitation of Czar Alexander II of Russia.

The Brussels Conference confirmed the principles underlying the St Petersburg Declaration and, being convinced that "a further step may be taken by revising the laws and general usages of war, whether with the object of defining them with greater precision, or with the view of laying down a common agreement, certain limits which will restrain, as far as possible, the severities of war", drew up a project of an International Declaration concerning the Laws and Customs of War. It was hoped that "war being thus regulated would involve less suffering, would be less liable to those aggravations produced by uncertainty, unforeseen events, and the passions excited by the struggle; it would tend more surely to that which should be its final object, viz., the re-establishment of good relations, and a more solid and lasting peace between the belligerent States."

None of the states which signed the Brussels Protocol were willing to ratify the Project, which, however, to a great extent formed the basis of the *Manual of the Laws of War on Land* drawn up by the Institute of International Law ¹² at its Oxford Conference, 1880. One of the aims of the *Oxford Manual* was "to restrain the destructive forces of war while recognising its inexorable necessities."

In its Preface, the *Manual* stated that "independently of the international laws existing on this subject, there are today certain principles of justice which guide the public conscience, which are manifested even by general customs, but which it would be well to fix and make obligatory . . . since 1874 ideas, aided by reflection and experience, have had time to mature, and because it seems less difficult than it did then to trace rules which would be acceptable to all peoples."

While the Institute did not consider that its Manual should be embodied into a treaty, "which might perhaps be premature or at least very difficult to obtain", it considered that the Manual could serve as a basis for national legislation and was "in accord with both the progress of juridical science and the needs of civilised armies. Rash and extreme rules will not, furthermore, be found therein. The Institute has not sought innovations in drawing up the Manual; it has contented itself with stating clearly and codifying the accepted ideas of our age so far as this has appeared allowable and practicable." By this comment the Institute touches upon a problem that has confronted every effort to enact rules intended to modify the rigours of war — the need to effect a compromise between the ideals of the humanitarian and the needs of the military; in so doing "it is rendering a service to military men themselves. In fact, so long as the demands of opinion remain indeterminate, belligerents are exposed to painful uncertainty and to endless accusations. A positive set of rules, on the contrary, if they are judicious, serves the interests of belligerents and is far from hindering them, since by preventing the unchaining of passion and savage instincts — which battle always awakens, as much as it awakens courage and manly virtues — it strengthens the discipline which is the strength of armies; it also ennobles their patriotic mission in the eyes of the soldiers by keeping them within the limits of respect due to the rights of humanity."

The Institute also, for the first time, emphasised the need for dissemination and education in so far as the law of armed conflict is concerned, for "in order to attain this end it is not sufficient for sovereigns to promulgate new laws. It is essential, too, that they make these laws known among all people, so that when a war is declared, the men called upon to take arms to defend the causes of the belligerent States, may be thoroughly impregnated with the special rights and duties attached to the execution of such a command."

Hague Conference of 1899

Following the promulgation of the Brussels Declaration and the *Oxford Manual*, governments seemed ready to move towards the adoption of an international treaty concerning the conduct of armed conflict. In 1899, at the initiative of the Czar, 26 countries met at The Hague and adopted Conventions and Declarations which underlie that part of the law of armed conflict which is still known as the Law of The Hague.

The Declarations adopted by the Conference¹³ related to a ban on the launching of projectiles and explosives from balloons or by other similar new methods;14 a ban on the use of projectiles, the only object of which is the diffusion of asphyxiating or deleterious gases;15 and a ban on the use of bullets which expand or flatten easily in the human body, such as bullets with a hard envelope, of which the envelope does not entirely cover the core or is pierced with incissions.16 More important than the Declarations adopted at the 1899 Hague Conference was the Convention (II) with Respect to the Laws and Customs of War on Land,17 to which was attached a set of Regulations seeking to spell out the rules of law governing the conduct of armed conflict on land.

While the Hague Regulations of 1899 clearly constituted the first codification of the laws and customs of war accepted by the powers in a binding document, it is important to realise that the draftsmen were aware that their code did not cover "all the circumstances which occur in practice". With this in mind, they emphasised that the Regulations were not exhaustive and that, in so far as they were silent, customary law would continue to govern the situation. The form in which they expressed this understanding

(known as the Martens clause) is not merely of historic interest, but is equally relevant today:

"the High Contracting Parties clearly do not intend that unforeseen cases should, in the absence of a written undertaking, be left to the arbitrary judgment of military commanders. Until a more complete code of the laws of war is issued, the High Contracting Parties deem it expedient to declare that in cases not included in the Regulations adopted by them, the inhabitants and the belligerents remain under the protection and the rule of the principles of the law of nations, as they result from the usages established between civilised nations, from the laws of humanity, and dictates of the public conscience." 18

H IV Art. 2 provides that:

"The provisions contained in the Regulations . . . are only binding on the Contracting powers in case of war between two or more of them. These provisions shall cease to be binding from the time when, in a war between Contracting Powers, a non-Contracting Power joins one of the belligerents." Most of the pre-World War I Conventions dealing with the law of armed conflict contain a provision similar to Article 2. Many of The Hague Conventions provisions are now, however, declaratory of customary law, that is, they are binding even on non-parties to the treaty.¹⁹

Hague Conference on 1907

In 1907, again at the invitation of the Czar, a second Conference was held at The Hague and this, in addition to revising the 1899 Convention on the Laws and Customs of War on Land, produced twelve other Conventions concerning warfare, both on land and sea, and relating to the rights and duties of neutrals. It also reiterated the 1899 Declaration concerning the discharge of projectiles and explosives from balloons. To a great extent H IV of 1907 relative to the Laws and Customs of War on Land reproduced the provisions of its 1899 precursor. However, it also introduced a principle regarding enforcement. By H IV Art. 3, "a belligerent party which violates the provisions of the said Regulations shall, if the case demands, be liable to pay compensation. It shall be responsible for all acts committed by persons forming part of its armed forces."

Neither H IV nor the annexed Regulations made any provision for the prosecution of individuals who disregarded or breached the Regulations. Trials of such persons for war crimes, prior to the establishment of the Nuremberg International Military Tribunal in 1945 were conducted by national tribunals²⁰ applying customary international law,²¹ the HR²² or, in the case of their own personnel, the national military or criminal code.²³

Of the substantive provisions of both the 1899 and 1907 versions of the Land Warfare Regulations (HR), the most important is Art. I which, until the adoption of AP I in 1977 (Art. 44(3)), defined the belligerents, that is the persons entitled to participate in combat, to whom the Regulations applied. Its purview extends to armies, militia units and to volunteer forces provided they are:

- commanded by a person responsible for his subordinates;
- have a fixed distinctive emblem recognisable at a distance;
- · carry arms openly; and
- carry their operations in accordance with the law and customs of war.

From the point of view of armed conflict on land, in addition to H IV the most important of the 1907 Conventions are H III (Opening of Hostilities), H V (Rights and Duties of Neutral Powers and Persons in War on Land), and H IX (Bombardment by Naval Forces).

The Conventions drawn-up in 1907 were supposed to remain in force until a Third Peace Conference. This was prevented by the outbreak of the first World War and no Conference for the purpose of revising The Hague Conventions has ever been called since. In both World Wars the belligerents generally accepted the 1907 Conventions as still in force and this was reiterated by the war crimes tribunals held after 1945, as well as by prize courts²⁴ sitting during the continuance of hostilities.

Australia is a party to the following Hague Conventions (all ratified for Australia by Great Britain on 27 November 1909):

- a. 1907 Hague International Convention III relative to the Opening of Hostilities
- b. 1907 Hague International Convention IV concerning the Laws and Customs of War on Land
- 1907 Hague International Convention VII relative to the Convention of merchant ships into War Ships
- d. 1907 Hague International Convention VIII relative to the Laying of Automatic Submarine Contact Mines

- e. 1907 Hague International Convention IX respecting Bombardment by Naval Forces in Time of War
- f. 1907 Hague International Convention XI relative to Certain Restrictions on the Exercise of the Right of Capture in Maritime War.

Developments Between the Two World Wars

At the time of the two Hague Conferences, it was not appreciated that aerial warfare might be of major significance. The only reference to this type of activity is in the Declaration concerning the launching of projectiles from balloons. The role played by aircraft during the First World War made it clear that some code of rules for this new field of conflict was necessary. In 1923, in accordance with a resolution adopted at the 1922 Washington Conference on the Limitation of Armaments, a Commission of Jurists meeting at The Hague drew up agreed Rules of Air Warfare. These rules were never embodied into an international treaty and are thus not legally binding, other than to the extent that they reflect or express rules of customary law. During World War II there was no treaty law specifically applicable to the conduct of air warfare. As a result the law of air warfare was based on analogies drawn from land and sea warfare and on customary law.

During the First World War it became clear that the Law of Geneva with regard to the treatment of those hors de combat was inadequate and in 1929 the Geneva Conventions were redrafted in the form of a Convention for the Amelioration of Condition of the Wounded and Sick in Armies in the Field and another relative to the Treatment of Prisoners of War. Since the Members of the League Covenant and proposals for disarmament might provide a substitute for war, there was not the same effort towards revising the Law of The Hague although the Geneva Gas Protocol was drafted in 1925. Further, the adoption of the Pact of Paris, 1928, which condemned aggressive war as an instrument of national policy was regarded as being the death knell for future wars. Australia acceded to the 1925 Gas Protocol on 24 May 1930.

War Crimes Trials Following World War II

The outbreak of the Second World War in 1939 indicated that neither the Covenant of the League of Nations nor the Pact of Paris was effective in preventing the outbreak of war, and the conduct of hostilities emphasised that the existing treaties were not as effective as had been hoped in introducing principles of humanitarianism into the law. While the war had made the inadequacies of The Hague Conventions clear, it was the generally accepted view, that the rules embodied in H IV "were recognised by all civilised nations, and were regarded as being declaratory of the laws and customs of war",²⁵ and as such applicable to all belligerents, whether parties to the Convention or not.

Insofar as the Geneva Prisoners of War Convention of 1929 was concerned, problems arose since the Soviet Union was not a party, and the German authorities refused to afford them even the minimum protection traditionally accorded to prisoners. ²⁶ The attitude of Admiral Canaris, head of the German counter-intelligence service, was similar to that of the International Military Tribunal towards H IV. He stated:

"The Geneva Convention for the treatment of prisoners of war is not binding in the relationship between Germany and the U.S.S.R. Therefore only the principles of general international law on the treatment of prisoners of war apply. Since the 18th century these have gradually been established along the lines that war captivity is neither revenge nor punishment, but solely protective custody, the only purpose of which is to prevent the prisoners of war from further participation in the war. This principle was developed in accordance with the view held by all armies that it is contrary to military tradition to kill or injure helpless people." 27

To this, Field Marshal Keitel, who had signed many of the orders relating to the treatment of prisoners of war, replied:

"The objections arise from the military concept of chivalrous warfare. This is the destruction of an ideology. Therefore, I approve and back the measures." 28

These measures provided for atrocious mistreatment of Russian prisoners of war. German conduct was subsequently condemned by the International Military Tribunal.

The London Charter of 1945 establishing the International Military Tribunal which sat at Nuremberg was an important step in the development of the law. In Article 6 the Charter indicated the offences over which the Tribunal would have jurisdiction:

- (a) Crimes against peace: namely, planning, preparation, initiation or waging of a war of aggression, or a war in violation of international treaties, agreements or assurances, or participation in a common plan or conspiracy for the accomplishment of any of the foregoing;
- (b) War crimes: namely violations of the laws or customs of war. Such violations shall include, but shall not be limited to, murder, ill-treatment or deportation to slave labour or for any other purpose of civilian population of or in occupied territory, murder or ill-treatment of prisoners of war or persons on the seas, killing of hostages, plunder of public or private property, wanton destruction of cities, towns and villages, or devastation not justified by military necessity;
- (c) Crimes against humanity: namely, murder, extermination, enslavement, deportation, and other inhumane acts committed against any civilian population, before or during the war, or persecutions on political, racial or religious grounds in execution of or in connection with any crime within the jurisdiction of the Tribunal, whether or not in violation of the domestic law of the country where perpetrated."

The great development in this Article is the description of crimes against peace and of crimes against humanity. Neither of these had formerly been defined or indicated as a crime under international law, although a number of writers had already been of opinion that the Pact of Paris (Kellogg-Briand Pact, 1928) had made at least aggressive war a crime. In its Judgment the Tribunal interpreted Article 6 of its Charter so as, for the purposes of the Judgment, virtually to equate crimes against humanity with war crimes as generally understood.²⁹

Post-War United Nations Resolutions Concerning War Crimes

Following the Nuremberg Judgment, the General Assembly of the United Nations in 1946 adopted a Resolution Affirming the Principles of International Law recognised by the Charter of the Nuremberg Tribunal.³⁰ According to the text of the Charter of the United Nations, except on specifically identified matters,³¹ the General Assembly is only able to make recommendations. The Resolutions, therefore, lack obligatory force and are purely political in character. However, there are some international lawyers who

contend, particularly when a Resolution has received overwhelming support, that such a Resolution is binding. In practice, there is at present a tendency for the majority of members of the United Nations to contend that a Resolution so approved is law-creating. Moreover, if the substance of a Resolution is frequently repeated and generally approved, it may be regarded as contributing to the development of customary law.

In 1947 the General Assembly adopted a further Resolution³² instructing the International Law Commission of the United Nations to formulate a statement of the principles of international law recognised in the Charter and Judgment of the Nuremberg Tribunal. The International Law Commission in 1950 drew up seven such Principles. Principle I affirmed the personal liability of anyone committing a crime under international law; Principle II affirmed the view that the failure of national law to condemn a particular act did not remove personal liability for that act under international law; Principle III confirmed that a head of State could not plead his status as constituting an immunity from criminal suit; Principle IV denied the defence of superior orders provided a moral choice was in fact open to an accused;33 Principle V confirmed an alleged war criminal's right to receive a fair trial; Principle VI confirmed the criminality of the acts defined in Article 6 of te London Charter: while Principle VII reaffirmed the Tribunal's finding that complicity in any of the acts thus defined was itself criminal.

Genocide Convention (1948)

A further development in the law of armed conflict was effected by the adoption of the Genocide Convention³⁴ in 1948, whereby certain acts defined in the Convention, "whether committed in time of peace or in time of war", are made crimes under international law.

Geneva Conventions of 1949

In 1949 the Geneva Conventions of 1929 were totally revised and brought up to date. Four conventions were adopted — Wounded and Sick in the Field, II — Wounded, Sick and Shipwrecked at Sea, III — Prisoners of War, IV — Civilians. The Civilians Convention is the consquence of the treatment meted out to the civilian populations of the occupied countries during the Second World War and represents

the first attempt to protect the civilian population in time of armed conflict. Essentially it is concerned with the protection of civilians in occupied territory.

All four conventions are to apply to any international armed conflict, whether a declared war or not, and even if one of the parties does not recognise the existence of the state of war. They also apply if there is a partial or total occupation of another's territory, even if the occupation has met with no armed resistence. Unlike The Hague Conventions, the 1949 Geneva Conventions expressly reject the 'all participation' clause, and provide for their application as between parties, even though one of the other belligerents is not a party to the Conventions. In addition if a state which is not a party to the Conventions abides by the provisions of the Conventions, then belligerents which are parties are also obliged to observe their provisions with regard to that state.

For the first time, too, an attempt was made at the 1949 Geneva Conference to extend a minimum of humanitarian protection to the parties involved in a non-international conflict. Article 3 of each of the four Conventions provides that in such a conflict.

"each Party to the conflict shall be bound to apply, as a minimum, the following provisions.

(1) Persons taking no active part in the hostilities, including members of the armed forces who have laid down their arms and those placed hors de combat by sickness, wounds, detention, or any other cause, shall in all circumstances be treated humanely, without any adverse distinction founded on race, colour, religion or faith, sex, birth or wealth, or any other similar criteria. To this end the following acts are and shall remain prohibited at any time and in any place whatsoever with respect to the abovementioned persons:

- (a) violence to life and person, in particular murder of all kinds, mutilation, cruel treatment and torture;
- (b) taking of hostages;
- (c) outrages upon personal dignity, in particular, humiliating and degrading treatment:
- (d) the passing of sentences and carrying out

of executions without previous judgment pronounced by a regularly constituted court,³⁵ affording all the judicial guarantees which are recognised as indispensable by civilised peoples.

Common Article 3 goes on to provide that "the application of the preceding provisions shall not affect the legal status of the Parties." This means that the application of the provisions does not change the nature of the conflict into an international armed conflict, nor does it remove the possibility that any member of the forces of the parties involved may be tried for treason.

The Conventions make one further departure of significance. For the first time they provide in treaty form clear obligation upon states to punish what the Conventions describe as 'grave breaches'36 even if those states are not parties to the conflict, the offenders and their victims not their nationals, and even though the offences were committed outside the territorial juridiction of the state concerned.37 In other words, the Conventions have introduced the concept of universal jurisdiction in so far as grave breaches are concerned, and if the state in question is unwilling to try an offender found within its territory, it is obliged to hand him over for trial to any party to the Convention making out a prima facie case.

Hague Cultural Property Convention (1954)

The Second World War had shown that in modern war not only public property belonging to the adverse party, and private property belonging to enemy personnel was liable to seizure or destruction. Historic monuments. places of worship, museums and the like were frequently destroyed, while cutural property, such as works of art, antiques, etc., were often stolen by senior government or military officers, or were transported by an occupying authority to its home territory. In 1954 an intergovernmental conference was convened at The Hague by the United Nations Educational, Scientific and Cultural Organisation, and this drew up a Convention for the Protection of Cultural Property in the Event of Armed Conflict. By this Convention, cultural property, rather widely defined and described as part of "the cultural heritage of all mankind", which has been specially marked in accordance with the terms of the Convention is made immune from attack during armed conflict. Australia ratified this Convention on 19 September, 1954.

Teheran Human Rights Conference (1968)

The next major development in the history of international attempts to control the conduct of armed conflict was the adoption unanimously by the International Conference on Human Rights, Teheran, of a Resolution calling for Respect of Human Rights in Armed Conflicts.³⁸ This conference was called by the United Nations to mark the International Year of Human Rights, 1968, in celebration of the twentieth anniversary of the adoption of the Universal Declaration of Human Rights, 1948. The purpose of the Conference was to review the progress made in human rights during those twenty years and to recommend action for the future. The Conferences passed a number of Resolutions, all of which lacked legal force, although the General Assembly of the United Nations called upon the Secretary-General of the Organisation to refer them to the various organisations which might be concerned with their implementation.³⁹ The Resolution on Human Rights in Armed Conflicts expressly pointed out that The Hague Conventions were only intended as a first step in the codification of the law of armed conflict: that the 1925 Geneva Protocol on gas warfare had not been universally accepted and probably needed revising; that the 1949 Geneva Conventions were not sufficiently broad in scope to cover all modern armed conflicts; and that there was generally insufficient regard given to humanitarian considerations in such conflicts. The Resolution also made a major departure in the international law of armed conflict with a reference to the need to protect those who were engaged in 'struggles' against 'minority racist or colonial regimes', recommending that they should be treated as prisoners of war or political prisoners. As a consequence, some six months later the United Nations General Assembly adopted a Resolution40 affirming as accepted rules of the law of armed conflict that:

- a. the right of parties to a conflict to adopt means of injuring the enemy is not unlimited;
- it is prohibited to launch attacks against the civilian population as such; and
- c. distinction must be made at all times between persons taking part in the hostilities and members of the civilian population to the effect that the latter be spared as much as possible, and calling on the Secretary-General to consult with the International Committee of the Red Cross as to what steps were necessary to give effect to this call for

observance of human rights in armed conflicts.

Edinburgh Resolution (1969)

In 1969 at its Edinburgh meeting, the Institute of International Law adopted a Resolution⁴¹ concerning the distinction between military and non-military objects and the problems associated with weapons of mass destruction. Perhaps the major significance of this Resolution lies in the references to the sources of international law of armed conflict, and particularly the affirmation of what its members — frequently regarded as the most respected exponents of the doctrine of international law — considered to be rules of established law, both conventional and customary.⁴²

United Nations General Assembly Resolution 2675 (XXV)(1970)

Subsequently, the General Assembly of the United Nations adopted a Resolution without opposition, affirming the "basic principles for the protection of civilian populations in armed conflicts, without prejudice to their future elaboration within the framework of progressive development of the international law of armed conflict". The first of these Principles asserted that "fundamental human rights, as accepted in international law and laid down in international instruments, continue to apply fully in situations of armed conflict". The remaining principles were largely abstracted from the Declaration of Teheran and the Resolution of the Institute of International Law.

Bacteriological Weapons Treaty (1971)

In 1971 the General Assembly of the United Nations adopted a convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and their Destruction.⁴⁴ The Preamble recalls the 1925 Geneva Protocol, and states that the Assembly is:

"Determined, for the sake of all mankind, to exclude completely the possibility of bacteriological (biological) agents and toxins being used as weapons, convinced that such use would be repugnant to the conscience of mankind, and that no effort should be spared to minimise the risk." The parties affirm their "recognised objective of effective prohibition of chemical weapons", and pledge themselves

never to develop, produce or stockpile such weapons, and undertake to destroy existing stocks.

Protocols Additional to the Geneva Conventions of 1949 (1977)

Responding to the call of the Teheran Human Rights Conference and the Resolution of the United Nations, the International Committee of the Red Cross undertook a study of the possiblility of bringing the 1949 Geneva Law more up to date, and in 1974 the Swiss Government invited the representatives of 122 states to attend a conference in Geneva for this purpose. The Geneva Diplomatic Conference on the Reaffirmation and Development of International Humanitarian law Applicable to Armed Conflicts ended in 1977 with the adoption of two Protocols additional to the Geneva Conventions of 1949. Protocol I dealt with international armed conflicts, while Protocol II for the first time constituted an international agreement for the application of humanitarian principles in noninternational armed conflicts.

Apart from bringing the law up to date, Protocol I makes fundamental changes in the law as it had existed in respect of international armed conflicts. It recognised that struggles conducted by national liberation movements in the name of self-determination are to be considered as international conflicts and subject to the international law of armed conflict; it changes the definition of combatants to include those fighting on behalf of such movements; it extends the protection given to civilians and non-military objects, and also prohibits action which is likely to have a long-term deleterious effect upon the environment; it extends the rights and privileges of medical and similar personnel and units; defines mercenaries and denies them combatant status; widens the concept of grave breaches to be found in the Geneva Conventions; and for the first time recognises civil defence as a matter requiring separate acknowledgement in the law of international armed conflict.

Protocol I does not replace the Geneva Conventions of 1949, but reaffirms and develops them. Insofar as it merely restates or rephrases the obligations in those Conventions it would be binding even for a state which has not ratified or acceded to it, but which a party to the Conventions. Equally, any state refusing to ratify or accede to Protocol I will remain bound by

the Conventions and by any principle embodied in Protocol I which is in fact a reaffirmation of what already exists in customary international law.

Protocol II aims, for the main part, to extend the humanitarian protection offered by common Article 3 in the Geneva Conventions to those participating in a non-international conflict, defined as virtually satisfying the conditions required to create a civil war situation.

UN Conventional Weapons Convention (1981)

In 1980, agreement was reached on a Convention and three annexed Protocols: Protocol I relating to fragments not detectable by X-rays; Protocol II relating to mines, booby traps, and other devices; and Protocol III relating to incendiary weapons.

The Convention is derived from two fundamental customary principles of the laws of war; the right of belligerents to adopt means of warfare is not unlimited; and the use of weapons, projectiles or material calculated to cause unnecessary suffering is prohibited. Both customary principles had been codified in Articles 22 and 23(e) of the Regulations annexed to 1899 Hague Convention II and 1907 Hague Convention IV. These customary principles had also been applied to particular weapons in such international agreements as the 1868 St Petersburg Declaration, the three 1899 Hague Declarations, the 1907 Hague Declaration, some of the 1907 Hague Conventions, and the 1925 Geneva Protocol.

The 1981 UN Conventional Weapons Convention differs from previous agreements on specific conventional weapons in that the Protocols as a whole primarily afford protection to civilians. Although the attempt was made during the 1979-80 Conference to formulate limitations on combatants as well as non-combatants, such efforts were largely unsuccessful. Protocol I does completely prohibit the use of certain weapons, but major military powers declined to consider such a comprehensive prohibition in respect of the other two Protocols. Protocols II and III only prohibit the use of certain weapons against civilians, and their use in some contexts, but do not absolutely proscribe their use against military objectives. Australia ratified this Convention on 29 September 1983.

Law of Sea Warfare

The above discussion on the history and sources of the law of armed conflict has been concerned primarily with conflict on land, together with occasional comments concerning aerial combat. While these developments were taking place, and frequently independently of them, international agreements were being drawn up regulating the conduct of armed conflict at sea. While these have not been discussed here. they may not be ignored. To some extent, the rules laid down for maritime conflict are similar to those for land warfare and are based on the same humanitarian principles. The international agreements that have been drawn up deal with the special peculiarities attaching to maritime warfare and, where this is not the case, adapt general principles which may be regarded as applicable to all armed conflicts.

National Legislation

In addition to the international agreements mentioned in this article, the law of armed conflict is governed by principles of customary international law and by such considerations of humanity as may be described as general principles of law recognised by civilised nations. 45 Further, there is nothing to prevent a particular country from laying down additional rules regulating the conduct of its own forces. Individual countries may also pass legislation as to the means by which jurisdiction for breaches of the law is to be exercised over its own personnel or in regard to captured members of the forces of the adverse party. In Australia, this is governed by the Geneva Conventions Act 1957.

Position of the ADF Regarding the Protocols

The ADF was consulted on the Australian position adopted in the Diplomatic Conference held in Geneva during 1974 to 1977 and it conducted an internal review of the Protocols⁴⁶, after signature, over several years. It proposed that Australia should enter certain Declarations of Understanding on ratification. That review presumed a parallel position on the part of the United States of America which had also signed the Protocols at Geneva. The United States second military review determined that Protocol I was militarily unacceptable⁴⁷ and in January 1987 the President transmitted the Protocols to the Senate advising that the United States should ratify Protocol II but not ratify Protocol I.⁴⁸

When the position adopted by the United States on Protocol I became known, a further review of the Australian military position was conducted and a decision made by COSC that, subject to certain additional Declarations of Understanding, the Protocols were militarily acceptable. Further interdepartmental discussions were held and a mutually agreed position has been reached concerning the Declarations of Understanding that Australia will make upon ratificiation.

This is not to say that Protocol I is free of difficulty.⁴⁹ On one military view the ADF should be free to employ any weapon and conduct military operations in any manner the commander on the spot sees fit. This is an extreme view that the government clearly does not accept (as evidenced by Australian commitment to other treaties and expressed concern on matters such as chemical weapons). The result is that there are "civilised limitation" to the discretion of the commanders and the conduct of troops. The Protocols state these limitations and questions raised in interpretation of them will be issues of degree rather than outright rejection of the protections proposed.

The ADF has not promoted ratification of the Protocols, that being a governmental responsibility, but has acted responsibly in providing advice on their military acceptability. There is more than a semantic difference between the two positions but there is some danger of them being merged in coming months before resumption of the debate in Parliament.

Military Approach to the Protocols

In my view the military approach to the Protocols should be based on the following factors:

- a. the Protocols represent a consensus of international views directed to alleviation of the excesses of warfare, particularly its impact upon persons who take no direct part in the hostilities;
- the ADF, recognising governmental commitment to the consensus achieved, approached
 a military review of the Protocols in a
 responsible manner and had regard to:
 - (1) its capacity to conduct operations in accord with the Protocols both in Australia and overseas:
 - the benefits that would flow from reciprocal application of the Protocols; and
 - (3) its capacity to act in concert with allies.

c. the review concluded that although there were difficulties, positive findings outweighed the negative and that with the addition of particular understandings, the ADF could meet its responsibilities consistent with the humanitarian obligations imposed by the Protocols.

Conclusion

This article has been a brief overview of the development of the law of armed conflict. It does not purport to state the law. Present doctine on the subject is contained in JSP(AS)1 Edition 2 Chapter 37. Annex A of that chapter establishes 4 appropriate levels of understanding for instruction in the subject. This is reproduced in the Manual of Army Training Volume 3 Chapter 3.8. This is a subject which will attain increasing relevance for all members of the profession of arms.

NOTES

- Keen, The Laws of War (1965), p. 34. Parole was the system whereby a captive was given his freedom in return for a promise not to take up arms again against his captor. This promise could be general and permanent in character, or for a particular war, or in a specified geographic area, or until a ransom had been paid. The situation is now governed by IIIGC Art.21., subject to the national law of the prisoner.
- 2. Keen, op cit., p.1.
- Schwarzenberger, International Law, Vol. 2, The Law of Armed Conflict (1968), Ch. 39; see, also, references to trials for "War crimes before drumhead courts martial" earlier than this, see Keen p. 192.
- 4. See, e.g., Keen, op cit., p. 147.
- 5. Henry V. Act 4, Scene 7.
- 6. Laws and Ordinances of Warre, 1639 (Clode, Military Forces of the Crown, 1869, vol. 1, App VI).
- See, for instance, Grotius, De Jure Belli ac Pacis (1625), often described as the first textbook on international law, although there were others which had been written before him and on which, to some extent, he based his text.
- 'Instruction for the Government of Armies of the United States in the Field' General Orders No. 100 (reprinted in Schindler and Toman, *The Laws of Armed Conflicts* (1973), p. 3).
- Declaration Renouncing the use, in Time of War, of Explosive Projectiles under 400 Grammes Weight.
- Although described as Additional to the Geneva Conventions, Parts III and IV of API are more related to The Hague Law.
- This only refers to those in the hands of the adverse party. One who has offered to surrender is covered by The Hague Law, but see also API Art 41(2)(b).
- The Institute is an unofficial body of leading scholars, whose eminence leads to their resolutions and proposals receiving the highest respect.
- It should be pointed out that although not all the greatest powers ratified or formally accepted these Declarations,

- the general view is that they are expressive of rules of customary law.
- This is the first attempt to lay down principle with regard to aerial warfare.
- The ban on gases was ultimately embodied in the Geneva Protocol, 1925.
- This Declaration was directed against the use of 'Dum-Dum' bullets.
- This Convention has been replaced in a revised form by Hague Convention IV, 1907.
- Preamble to the 1907 Hague Convention IV Respecting the Laws and Customs of War on Land (H IV).
- 19. E.g., H IV, Art. 4 affirming that prisoners of war are in the power of the enemy government and not of the soldier capturing them; Art. 7 the holding government is obliged to maintain prisoners; Art. 12 prisoners breaking parole may be punished if recaptured; Art. 22 the means of injuring the enemy is not unlimited; Art 23 the ban on the use of poison and the ban on denying quarter; Art. 28 the ban on pillage; Art 32 protection of one carrying a flag of truce, etc.
- In the case of the German trials held at Leipzig after World War I against German accused, these were in accordance with Art. 228 of the Treaty of Versailles.
- 21. See, e.g., German trial of Captain Fryatt, 1916, for attempting to ram a German submarine while captain of a merchant vessel (Garner, International Law and the World War, 1920, vol. 1 p. 407). Nurse Cavell, who had a breach of her status as a protected medical person, assisted in the escape of allied soldiers, was not tried for a war crime, but for a breach of the German Military Penal Code to which she was not strictly liable (ibid., vol. 2 p. 97). See, also, the Llandovery Castle, 1921, in which officers of a U-boat were sentenced by a German tribunal for, 'contrary to international law', firing upon and killing survivors of an unlawfully torpedoed hospital ship carrying a number of Canadian medical personnel (U.K., Cmd. 1450-1921; reprinted in Cameron, The Peleus Trial (1948), App. IX); trial of Eck - The Peleus Trial. 1945-ibid.); Klein and Others (1946), for killing allied civilian nationals contrary to international law (1 Law Reports of Trial of War Criminals, p. 45, etc.
- 22. See, e.g. *Drierwalde Case* (1946) *ibid*, p. 81, killing captured R.A.F. prisoners contrary to Art. 23(c).
- 23. Muller's Case (1921 U.K., Cmd. 1421, p. 26) or Heynen's Case (1921 U.K., Cmd. 1422, p 18), both for ill-treating prisoners of war contrary to the German Penal Code and the Military Penal Code; see also, U.S. trials of personnel accused of crimes against prisoners or enemy civilians during the Korean and Vietnam wars, e.g. U.S. v Keenan (1954) 14C.M.R. 742; U.S. v Calley (1969/71; 1973) 46 C.M.R. 1131, 48 C.M.R. 19, 1 Mil. Law Reporter 2488.
- 24. Prize courts are special tribunals established by belligerents to adjudicate upon seizures of vessels and goods belonging to or trading with the enemy. While they are national courts, they apply to the international maritime law of war, as amended by any special national statutes which may apply to them as national courts. It was held by the Judicial Committee of the Privy Council in *The Zamora* (1916) 2 A.C. 77 that, while such courts would be bound by an order in Council, this is not the case if the Order purports to reduce the rights of the adverse party.

- Judgment of the International Military Tribunal for the Trial of German Major War Criminals (Nuremberg), 1946, H.M.S.O. (U.K.), Cmd 6904 (1946), p. 65.
- A useful summary of the treatment meted out to Soviet prisoners is to be found at pp. 46-48 and 91-92 of the Nuremberg Judgment.
- 27. Ibid, p. 48.
- 28. Ibid, pp. 91-92.
- Schwelb, 'Crimes against Humanity', 23 BYIL (1946), p. 178.
- 30. Res. 95(1) 1946.
- E.g., budgetary matters, confirmation of a Security Council recommendations to admit a new member to the Organisation, etc.
- 32. Res. 177(II), 1947.
- 33. In fact this was different from the wording in the London Charter which provided (Art. 8) that compliance with an order did not absolve from responsibility, "but may be considered in mitigation of punishment if the Tribunal determines that justice so requires".
- General Assembly Res. 260 (III)A; in force 1951. The Genocide Convention was ratified by Australia 8 July 1949
- This may be a court martial or a military war crimes court, provided the safeguards referred to are observed.
- The definition of grave breaches will be found in IGC, Art. 50; IIGC 51; IIIGC 130; IVGC 147.
- IGC Art. 49; IIGC, Art. 50; IVGC Art. 129; IVGC, Art. 146. The Geneva Conventions are part of Australian law by virtue of the Geneva Conventions Act 1957.
- 38. 1968, Schindler/Toman, p. 189.
- 39. Res. 2442 (XXIII) 1968.
- 40. Res. 2444 (XXIII) 1968.
- 41. Schindler/Toman, p. 193.
- 42. It should be borne in mind that, despite the status of the members of the Institute and the respect in which they are held, the Resolutions are still nothing but the views of its members, even though they are often regarded as ipinio juris (the view of the law) at the date of their adoption. Sometimes, however, the Resolutions are in the nature of proposals as to what the law ought to be. in which case they have no legal status at all. Equally, the fact that the Resolution states that it is expressive of existing law does not give it any legal authority. The legal value of the Resolution depends upon its being accepted as a proper exposition of the law by the states whose interest might be affected by it. As one example, the United States Dept of Defense has rejected this resolution as an accurate statement of the law relating to armed conflict (67 AJIL 1973, p. 122).
- 43. Rex. 2675 (XXV), 1970.
- 44. Australia ratified this Convention on 5 October 1977.
- 45. See, e.g., charges in the Einsatzqrupen Case (U.S. v. Ohlendorf 1947) including charge 10 alleging "acts and conduct... which constitute violations of the general principles of criminal law as derived from the criminal law of all civilised nations" (4 Trials of War Criminals before the Nuremberg Military Tribunals under Control Law No. 10, p.21).
- 46. Report of the Working Party to consider the Operational and Training Implications for the ADF of the Protocols Additional to the Geneva Conventions, dated 12 August 1949, of 24 June, 1983. The Joint Working Party was chaired by CJOP and consisted of representatives of FASSIP, CNORP, COPS-A, CAFD, DGMILS,

DGETP (representing FASPAP), DGNDO, ASLEG and the chairman of SHPC.

- 47. The United States conducted its first military review in 1979-80. On 19 June, 1980 the Chief of International Law in the Office of The Judge Advocate General of the Army, W. Hays Parks, submitted a memorandum to TJAG that he did not believe that the work accomplished by the first review constituted the full military review promised to the Joint Chiefs of Staff. This was subsequently agreed by the Joint Chiefs and the United States maintains that its full military review did not commence until 8 Dec, 1980. It was completed in December 1985. The Joint Working Party was not aware of a change of attitude by the United States in this second review. A copy of this review was obtained by the Directorate of Army Legal Services in 1987.
- The President of the United States concluded that while Protocol I had certain meritorious elements, it was

fundamentally flawed. He cited two particular concerns as examples of the flaw:

- a. it would give special status to wars of national liberation, an ill defined concept expressed in vague, subjective, politicised terminology; and
- it would grant combatant status to irregular forces even if they did not distinguish themselves from the civilian population and that would endanger civilians among whom terrorists and other irregulars concealed themselves.
- 49. There has been recent criticism of Australia's intention to ratify the Protocols. See, for example, Greville, "Don't ratify the Geneva Protocols", Pacific Defence Reporter October 1988, p 18, and Garde, "The Case against Protocol 1", Pacific Defence Reporter February 1990, p. 10.



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New Rifles for Defence Force

The new generation of assualt rifles for the Australian Defence Force was formally handed over last last year by the manufacturer ADI to the Minister for Defence Senator Robert Ray.

The handover ceremony was held at ADI's Lithgow facility.

The new rifle, the AUSTEYR F88 will replace the self-loading rifle (SLR) which was introduced into service in 1959.

The Australian Army Chief of General Staff, Lt.Gen. John Coates, holds the new ADI made AUSTEYR F88 assault rifle. Also pictured at the formal handover ceremony are the Australian Minister for Defence, Senator Robert Ray (second from left); ADI's managing director, Ken Harris (far left); Federal Member for Calare and Minister for the Arts, Tourism and Territories, David Simmons (middle); managing director Steyr Mannlicher, Heinz Hambrusch (far right).



The Motorization of the Australian Army

By Lieutenant Colonel, Gregory C. Camp, Infantry, U.S. Army

Introduction

In March, 1987, the Australian Government published a comprehensive defence policy review entitled, The Defence of Australia. The paper sets forth the strategic direction of the Australian Defence Force (ADF) and serves as the basis for defence planning in future years.1 In addressing the future requirements for the Australian Army, the paper states, "We must have mobile land forces to meet and defeat armed incursions at remote locations."2 Later in the paper, the Army's requirements are explained to include, "protection of military and infrastructure assets that support the projection of our maritime power."3 The purpose of this article is to propose a force which can meet these requirements, which is affordable, and which offers flexibility to defence planners. For the purposes of the article I will call this force "motorized". In developing arguments, I will use the specific equipment and some concepts now found in the U.S. Army's 9th Infantry Division (Motorized). I do this because I am personally familiar with that equipment and their concept. I hastened to add that it is the motorized concept that I am offering for consideration. The specific equipment could take many forms, so long as it does not significantly alter the basic concept. In fact, one of the attractive features of this proposal is that the equipment can be easily produced in Australia.

I will develop the motorized concept for Australia by addressing its applicability in three major areas. First, there is no reason to develop a defence force unless it can meet and defeat the threat. Based on the threat, I will demonstrate that the motorized force meets the White Paper's requirements for ground forces in defence of Australia. Furthermore, it does so with great flexibility; and, of major importance in Australia, it is affordable. In fact, it is cheap compared to any alternative that approaches its capabilities. Lastly, it provides defence planners with a



Vehicles can be easily transported under a UH-60 helicopter

number of flexible options to address numerous difficult issues brought about by the new northern focus of the *White Paper*.

The Motorized Concept

Before going on, I think an explanation of this motorized concept is needed. I do not intend to develop a detailed force structure. Instead, I will rely on the basic motorized concept and illustrate that concept with some specifics. The motorized concept is built around a family of vehicles. The specific family I am using is the High Mobility Multipurpose Wheeled Vehicle (HMMWV). This family has extremely good cross-country mobility, is light weight, and can be air transported under a UH-60 helicopter. Further, three fully loaded vehicles can be transported in the cargo bay of the C-130 aircraft. It is highly mobile and



The infantry squad vehicle

can attain speeds in excess of 100 kph on primary roads.4 The infantry squad version of this vehicle can transport an infantry squad of eight men and their basic load of equipment, rations and ammunition. Within the company group, all vehicles are from the family. The company group can move in excess of 550 kilometres without refuelling. Mini-fuellers attached to the company group, can extend that range significantly. Combat support vehicles at battalion level are also from the same family. The weapons capable of being mounted include the TOW 2A, MK19 (a 40mm grenade machine gun with rate of fire of 250-350 rds/min), the 50 caliber MG, the 20mm MG, M60 machine gun, and the Squad Automatic Weapon (SAW). The on-board storage capacity enables the crew to sustain itself while operating over vast distances, away from higher level support. The platoon sergeant has the role of a fighting logistician and his vehicle allows significant organic resupply capability at platoon level. The battalion's headquarters company consist of a combination of HMMWVs, most located at the command posts and forward trains, and heavier support vehicles at the rear/ field trains area. All levels of support and

sustainment are available to the company group from the HMMWV family of vehicles. Replenishment of these vehicles and rear support is provided by the heavier vehicles from the rear/field trains.⁵

The Proposal

What I am proposing is that two of the three regular brigades become motorized. This would, of course, include their full brigade group (engineers, artillery, signal, surveillance, etc.) becoming motorized. For reasons which will be developed later, I propose to keep a brigade group configured as the Operational Deployment Force (ODF). That brigade should include the airborne battalion group as well as one of the current battalions organized under light scales. Selected reserve units may also become motorized. For example, surveillance units assigned to NOR-FORCE may benefit by using this concept. However, most of the reserves will remain under light scales.



Combat support vehicle



Combat support at battalion level

Force Structure Capability to meet the Threat

For any proposed force structure to be credible, it must be able to defeat the threat. More specifically, every country accepts risks in this regard, since assured defence is not economical. The key is to reduce this risk to an acceptable level. In Australia's case, this becomes very difficult to judge. The lack of any clear threat is a national blessing and should remain the goal of political leadership for the future. However, the lack of a threat creates enormous problems for defence planners. It does not enable planners to then configure their forces to counter such a threat. It requires the defence forces to have a more expensive and expansive capability that can counter any number of potential threats. It is this uncertainty that has caused the defence planners to describe the threat in rather vague terms. At the same time, the range of capabilities required of the ADF and, specifically, the Army, are specified based on providing reasonable assurance of success against any of the possible scenarios.

The Dibb Report provides the basis for addressing the threat. It refers to the most likely threat to Australia in three broad categories: low level, escalated low level, and more substantial conflict. The problems in designing a force to meet these threats is at the centre of the controversy over the future of the Army. On the low end of the conflict spectrum, the Army might expect small raids (less than company size) on isolated northern communities. This might be designed to sabotage defence or civil infrastructure, or offshore resource bases. At the high end of the spectrum, the Army might have to contend with an attempted lodgement on Australian territory while simultaneously responding to a number of the previously mentioned raids.6

In addition to looking at the objectives of a potential enemy, one must consider the terrain and weather. Once again, this causes great concern for force structure planners. The most likely potential targets of an enemy are dispersed over vast distances in the north of Australia. While terrain and weather are militarily considered neutral, by taking them into account, one can build a plan that maximises their potential benefit. Conversely, without due consideration, they add to the formidable task of the Army.

It is with all these factors considered that the White Paper states:

Government policy is that, ... the Army's structure must include highly *mobile* forces capable of rapid *deployment* anywhere within Australia and its territories to conduct protracted and dispersed operations.⁷

Later, in that same document, the required force is spelled out in more detail, as follows:

We need a force structure that includes a light air portable force, capable of rapid *deployment*; forces capable of following up an initial deployment with greater combat power to reinforce deployed formations if necessary.

Before making the case for motorized, I think a preliminary discussion on mobility is necessary. In his policy statement, The Army in the 1980's, the then Chief of the General Staff of the Australian Army, LTG Sir Phillip Bennett, spoke of the need for "strategic, tactical and battlefield mobility." These three types of mobility are all important, but usually inversely proportioned to one another. For example, light scaled infantry is highly strategically deployable. That is, they can get from Townsville to the appropriate location by air very rapidly. However, by themselves they lack tactical or battlefield mobility. If augmented with utility helicopters, they can move from their strategic debarkation location to dispersed locations rapidly to counter the enemy threat. However, once engaged with the enemy, they lack the capability to manoeuvre rapidly without first breaking contact to conduct additional airmobile operations. Conversely, a heavy force from 1st Brigade has the capability to manoeuvre, once engaged by the enemy, very rapidly. Within reasonable distances such a force can deploy from strategic debarkation locations to hostile areas rapidly. However, the strategic deployability of these forces is far more difficult and considerably slower than a light scaled formation.

Enter now the motorized concept as described. In terms of strategic deployability, it offers two options. First, it can be loaded on the existing RAAF force of six Boeing 707s and 24 C-130 E/H transport aircraft and sent to the strategic debarkation location rapidly. Granted, it does take more aircraft and more time than an ODF type formation; but, depending on the actual threat, this may be the force of choice and the capability for rapid



Resupply capability at platoon level

deployment by air of portions of the motorized force is clearly within current ADF capability. 10 Secondly, the motorized unit can rapidly load its basic combat allowance at its home station — even Holsworthy — and literally *drive* to the hostile location. The actual drive may take five to six days in remote locations of North Western Australia. However, this is in keeping with stated policy that:

force structure includes light air portable forces (read the ODF), and force capable of following up with greater combat power (read motorized).¹¹

When considering the other two types of mobility, the proposed motorized formation also offers some unique capabilities. Chief of the Australian Defence Force, General Gration, recently commented on the mobility of the Army's 2nd Cavalry Regiment which will be moving to Darwin by 1992. He said,

We will be giving it wheeled vehicles which are better than tracks for the great distances it has to cover.¹²

As compared to a heavy (mechanized) force, motorized forces can move from one dispersed hostile area to another more rapidly and more reliably. Once engaged, both forces have the capability to manoeuvre rapidly on the battlefield and both possess far superior fire power compared to a light scaled unit. As compared to a light scale unit, even one augmented with utility helicopters, the motorized concept is able to deploy rapidly from one hostile area to another; and, once there, to bring superior firepower and manoeuvre to bear on the enemy.

In certain scenarios, both driven by enemy and weather, the motorized force as described above may not be suitable. It is for this reason that I have proposed to maintain the ODF in the force structure, as a truly rapid reaction force. If reinforcements are required and conditions do not permit the motorized force as configured to respond, these forces can be used in a dismounted, or light scale, version. The infantry skills of the motorized soldier are the same as his ODF counterpart, except, of course, the airborne

capability. Granted, there may be some additional emphasis in the ODF on certain skills and training time may be greater there as well. However, as compared to an M113A1 armoured personnel carrier (APC), which is currently in the Army's inventory, the maintenance requirements for a HMMWV family of vehicles is significantly reduced. This allows more time to devote to basic infantry skills than would be the case in a mechanized formation.

One of the most widely debated and contentious issues surrounding the Dibb Report and the White Paper has been the issue of mechanization. Under the previous "core force" concept, a mechanized formation was required to maintain the expansion base skills. The Dibb Report deemphasized this concept, 13 although the White Paper did say,

Maintenance of a range of capabilities in the ADF applicable to higher levels of conflict ... has been endorsed by successive governments as appropriate.14

The most perishable and most important expansion base capability is the ability to conduct combined arms manoeuvre operations at speeds commensurate with mechanized forces. There is a difficult transition between commanding and controlling dismounted forces, even airmobile ones, and mechanized forces. The interrelationship between the combined arms is more difficult as a result of the speed and distances required by a mechanized force. Appropriately, these skills must be maintained in the Army. Under the motorized concept, these skills would be expanded to two full brigades. This is possible, because it is the very application of this speed over distance that makes the motorized concept so valuable for the more likely contingencies. True, large scale combined arms operations are not the immediate focus of the Army to counter the more credible threat. However, even at platoon and company level, the incorporation of combined arms assets at high speed over vast distances is an imperative to counter the most credible threats. The ongoing Kangaroo exercises (held biennally in Western Australia with U.S. forces) are sufficient to employ and train higher level formations in combined arms operations.

Another important factor in favour of the motorized concept is the ability to tailor the force to meet the threat, since the motorized force has great organic capability to carry its own supplies. It also has a wide range of configurations and

the capability to use different weapons from the same platform (50 cal, M-60, Mk19). As a result of these factors, the motorized force can be easily tailored to meet the potential threat or geographic area. For example, the Mk19 is an impressive area coverage, anti-infantry weapon. It is ideally suited against an infantry threat in open country. Conversely, it is not good in close country, urban areas, or against medium to heavy armour. Similar arguments can be made for the other weapon systems capable of being employed on the same HMMWV platform.

Any discussion of this motorized concept would be shallow if it did not include the most glaring shortcoming of the concept — its lack of armour protection. It is, in fact, this shortcoming that has created many of the advantages (strategic deployability, tactical deployability, and flexibility) discussed previously. It is also going to be the key factor in the affordability discussion to follow. Nevertheless, the issue of poor armour protection needs to be addressed in terms of the soldier who depends upon it. It is of little comfort to him that his unit was devastated by artillery because his "thin-skinned" vehicle had greater strategic deployability.

To address the issue of armour protection, we must consider the threat. Once again, the vagueness of a credible threat to Australia complicates matters. However, the Dibb Report suggests that "artillery will not find concentrated targets in the conventional sense."15 Of course, this refers to enemy targets, not friendly targets. However, it is precisely the concentration of enemy artillery that poses the greatest threat to the motorized force. The fact that Dibb does not envisage such a concentration is a large factor in determining the acceptable risk one assumes when equipping one's force with motorized vehicles as described here. Beyond wishing away the threat, tactics and techniques go a long way towards reducing vulnerability. Certainly distance, speed, rapid concentration, and equally rapid dispersion reduce the target of opportunity for the enemy. Another useful technique is to conduct operations at night, "using night vision goggles (NVGs) and sensors to enhance your capability."16 Naturally, one cannot always dictate the time of operations, particularly in a defensive scenario. Nevertheless, the capability to operate at night reduces vulnerability greatly, while simultaneously enhancing the offensive portion of the "defensive strategy".

At this point, I should also make a strong case to keep the armoured regiment at full strength. With the conversion to a motorized force, the armoured regiment represents the only real armour protected capability. In conjunction with motorized or dismounted infantry, the tank has proven it value in the widest possible range of conflicts. Certainly, the Japanese used them to good effect in Malaya in 1942. Later, the Australians used them as well in a jungle environment. This digression is not so much to say they are needed in the rain forests of Northern Australia, but to say that they have great value across the spectrum of conflict. Their importance on the low end of the conflict spectrum is enhanced by their now unique capability to provide armour protection. Further, it is precisely these tanks operating with motorized formations that maintains the critical skills of manoeuvre warfare previously discussed.

Before leaving the issue of armour protection, a final point needs to be made. That is, to what are we comparing the protection of motorized forces? Obviously, it is inferior to mechanized forces. However, currently only one battalion is mechanized. Even with the additional capability provided by the APC regiment, it is clear that in many scenarios non-ODF Australian forces would be employed under the light scales concept. Compared to them, the motorized force offers proteciton in the form of dispersion and speed that dismounted diggers do not at the moment enjoy.

Affordability

After determining that a force structure is capable of defeating the threat, within acceptable risk, the next logical issue concerns affordability. When considering affordability, a number of factors are important. First, of course, is the initial capital cost outlay. How much does it cost to buy the force structure? Second, how much does it cost to operate the force structure and maintain it? A third set of factors might be called second order effects. For example, will the majority of the first two costs be spent in Australia or purchased abroad? Will the force structure proposals spawn any additional capital and operating costs (motor parks, infrastructure, etc.)?

To address the first issue of capital cost, a small digression is in order. When the motorized concept was developed in the United States, it was envisaged as a formation built around an assault gun and fast attack vehicle. While domestic and internal military debate continued, it was decided to equip the motorized force with inexpensive HMMWV's as an interim solution. The designers of the U.S. motorized concept, like those of the Australian "Project Waler APC", fell prey to a desire to incorporate more and more into the equipment.17 Consequently, it was priced out of the competition and we backed into the inexpensive, but highly capable, HMMWV motorized force. As a basis of comparison, the M113A1 costs \$216,000 (U.S.) a copy. 18 The basic HMMWV costs \$21,000 (U.S.) a copy.¹⁹ Hence, at the same or lower cost of the 700 APC's in the current Australian inventory, Australia could purchase or produce over 7,000 HMMWV's, far more than needed to fulfill the requirements of this article's proposed force.

The enormous size and weight of the M113 also contributes to its expensive operating cost versus the HMMWV. In addition to the higher maintenance cost in terms of spare parts and hours of maintenance, the fuel consumption of the two is dramatically different. Current cost estimates called for an operating cost of \$3.74 per mile for an M113 versus \$.38 per mile for a HMMWV.²⁰ By utilizing a single family of vehicles, additional savings are possible in spares. This is possible because economical quantities of a relatively few number of spare parts are required to keep the fleet operational. This also reduces infrastructure for storage and forward issue at all levels.

The last issue concerning affordability is what I have called the 'second order effects'. While I am no expert in industrial production capability, the HMMWV is merely a rugged version of a four-wheel drive, all terrain vehicle. The beefed up suspension and enhanced air filter capability enable the HMMWV to achieve better results in dusty, cross-country operations than its civilian counterpart. Yet, it would not appear that there are any technological requirements for such rugged vehicles that could not be met within Australian industry. In fact, the peculiar and specific conditions found in Northern and North Western Australia may well lead to a "motorized" family of vehicles more specifically tailored for the harsh expanses in which it would operate. The key here would be to keep it simple and affordable. I will address some additional potential second order effects next in discussing possible alternative for defence planners to consider.

Flexibility for Planners

To set the stage for this discussion, I would point out there are perhaps two major changes from an Army perspective that are a consequence of the White Paper. They are the emphasis on rapidly deployable forces to meet and defeat a threat within Australia or its territories, and the consequent emphasis of the Northern and North Western part of Australia where the most credible threat would arise. The geography of that part of Australia poses a number of additional factors to be considered by the defence planner, particularly the Army planners. As General Gration has said, "We are shifting the centre of gravity of the Defence Force north."21 This militarily justifiable stance has its negative side as well. Some of those negatives to shifting forces to the north are captured by J.O. Langtry in his working paper "Garrisoning" the Northern Territory: The Army's Role. Among the arguments against garrisoning in the north are:

- Undesirable disruption of families and family support;
- Dislocation of mutually supporting activities e.g. training, interaction between 1st Armoured Regiment and the Armoured Centre:
- Lowered morale to be associated with a protracted posting to the north; and
- Huge cost of relocation which might be better spent elsewhere in force structure, notably in the area of improving the Army's capacity for rapid deployment anywhere across the north.²²

The Strategic self deployability of the motorized concept offers some flexibility in planning locations for regular units. One option is no change in the current locations of brigades in Sydney, Brisbane, and Townsville. Another is stationing of brigades in Townsville (no change), Darwin, and Perth. This is consistent with the suggestions by MG (Ret) J.D. Stephenson to form a joint headquarters in Darwin, North Queensland and Western Australia.²³ Obviously, variations of these options are also available. Trade-off costs in capital expenditure of new



Other types of combat support vehicles

bases versus feasibility of strategic deployment and deterrence value of the options must be carefully considered.

The relatively low cost of the motorized concept could provide for affordable prepositioning of equipment in the north and garrisoning of forces in current locations. This concept has already been proposed by Langtry with respect to heavy equipment such as tanks and guns.²⁴ From an affordability point, the capital expenditure of vehicles is well within the previously discussed 7,000 vehicles that equate to the capital cost of the current APC force. An additional consideration is the added cost of facilities and storage/maintenance cost at their pre-positioned locations. Additional sets of vehicles at home station, while still within the 7,000 vehicles discussed, could possibly be reduced by only using a "core force" of vehicles. Training on the basic infantry skills, like marksmanship, dismounted tactics, military operations in urban terrain (MOUT), and airmobile training could provide alternatives during the period when sister units were using the "core vehicles" for their training.

Considerations must be given to the long term cost of exercising regularly with pre-positioned equipment in the north versus initial savings of perhaps \$1 billion in capital expenditure for base facilities of a brigade size force garrisoned in the north. Pre-positioning equipment may or may not prove desirable, but another separate question is pre-positioning supplies. Stores of ammunition,

rations, water, and fuel in the north could make the motorized concept more rapidly deployable on less aircraft and with greater staying power than self deploying motorized formations. The cost and maintenance of these forward supplies must be weighed against acceptable risk and affordability. The point here is that the motorized concept offers a variety of options for the defence planner. It's no longer an either/or position. These options could help the Australian defence planners while increasing the deterrence value of the ADF by creating more uncertainty and more possibilites in the eyes of a potential enemy.

Conclusion

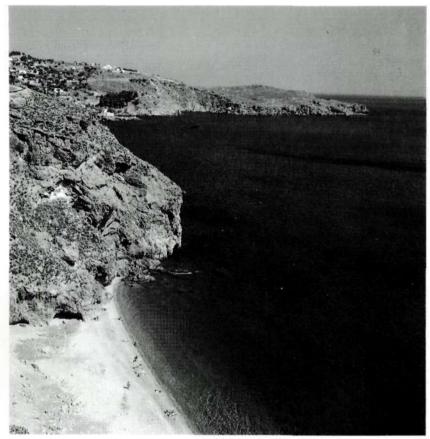
The motorized concept contained in this article is not the perfect solution to the unique strategic challenges faced by the Australian Army. It is, however, an affordable concept that provides great flexibility. It fulfils the requirement to have "mobile land forces to meet and defeat armed invasion at remote locations ... and protect military and civilian infrastructure assets."25 It does so with great flexibility, and important capability considering the wide range and ambiguous nature of the threat. It provides for current capability to meet the more credible contingencies, yet without detracting from that mission, ensures the maintenance of the important manoeuvre warfare mind set so vital as an expansion base capability. It seems reasonable that this affordable motorized concept will provide new and significant investment opportunities within Australian Industry, Lastly, owing to the factors mentioned above, it gives defence planners a range of options not previously available. These options can be the salvation of the Australian Army, in light of two major changes in its orientation — self-reliant layered defence and a consequent movement of the centre of gravity north. At the same time, these options have exactly the opposite effect on any potential enemy, increasing his uncertainty and hence increasing the deterrent value of the Australian Army.

NOTES

- Australia, Department of Defence, The Defence of Australia, (Canberra: Australian Government Publishing Service), March 1987, p. x.
- 2. Ibid., p: viii.
- 3. Ibid., p: 32.
- Steven Miller, "Soft-Skinned Vehicles in Combat," NATO's Sixteen Nations, June 1987, p. 81.
- Stephen Bowman, "The Old Reliables: One of a Kind," *Army*, February 1988, pp. 30-32.
- Paul Dibb, Review of Australia's Defence Capabilities, (Canberra: Australian Government Publishing Service, 1986).
- 7. The Defence of Australia, p. 53.
- 8. Ibid., p: 54.
- Australian Army, The Army of the 1980's (Canberra, 2 August 1982), p: 4.
- 10. Dibb pp: 12-14.
- 11. The Defence of Australia, p. 53.
- Peter Howard and Frank Cranston, "Australia's Defence Reorganization," *Jane's Defence Weekly*, 24 Dec 1988, p. 1597.
- 13. Dibb, p:138.
- 14. The Defence of Australia, p. 26.
- 15. Dibb, p: 11.
- 16. Ibid., p: 142.
- Gregory Copley, "A conscious Creation of the Future, an Interview with Australian Defence Minister Kim Beazley," *Defence and Foreign Affairs*, August 1988, p: 22.
- Figures supplied by Lynn Smith, Project Manager Office, M113 Family of Vehicles, Warren, Michigan, 7 March 1989.
- United States, General Accounting Office, Army's Decision to Gegin Production of the HMMWV Was Premature, 12 June 1984, p. i.
- Figures supplied by Comptroller, 9th Infantry Division, 15 February 1989.
- 21. Howard and Cranston, p. 1597.
- J.O. Langtry, Garrisoning the Northern Territory; The Army's Role, Working Paper no. 132 (Canberra: Strategic Defence Studies Centre, The Australian National University, August 1987), p: 10.
- MG J.D. Stevenson, "Dibb Report's Major Impact", Pacific Defence Reporter Annual Edition, December 1987, p 205.
- 24. Langtry, p. 5.
- 25. The Defence of Australia, p. x.

The views expressed in this article are solely those of the author and do not reflect the official policy or position of the Department of the Army, the Department of Defense, or the United States Government.

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Come and live the spirit!

The Air Power Notebooks of Air Vice-Marshal H.N. Wrigley

By Air Commodore Brendan O'Loghlin and Wing Commander Alan Stephens, RAAF

For the first 70 years of its existence as an independent service the Royal Australian Air Force did not have an officially endorsed, indigenous volume of air power doctrine.1 Explanations can be found for that circumstance. In the period between the wars the RAAF was explicitly subordinated to the Army and the Navy, with its main roles being those of supporting land and sea forces. Funding was inadequate, with the Air Force receiving less than 10 per cent of the total defence appropriations from 1921 to 1930,2 Australia's strong commitment to the Imperial defence arrangements and the RAAF's dependence on the Royal Air Force further increased the tendency simply to adopt existing doctrine. Thus, the RAAF's sole definitive publication on air power between 1921 and 1990 was the British manual title Operations, which was used from 1957 to 1984.

It should not be surprising, then, that in the late 1980s the RAAF's Chief of the Air Staff, Air Marshal R.G. Funnell, observed that the use of air power in military operations 'has been and continues to be the major intellectual problem confronting military thinkers', as a consequence of which air power as an element of national military power 'has been consistently undervalued in Australian defence thinking'. Air Marshal Funnell identified as a major cause of that unsatisfactory state the failure of airmen to present a 'comprehensive, coherent, well-articulated and broadly supported theory of air warfare'.

It is in that context that the air power notebooks of Air Vice-Marshal H.N. Wrigley, CBE, DFC, AFC, RAAF, represent a significant addition to Austrlaian military historiography. In 1988, Air Vice-Marshal Wrigley's widow bequeathed to the RAAF Museum at Point Cook over 20 separate volumes of notes, essays, personal diaries, maps and photographs covering aspects of the AFC/RAAF's development and activities from 1915 to 1945. The documents of interest here are those contained in the first three volumes. In the absence of formal, officially



Air Vice-Marshall H.N. Wrigley CBE, DFC, AFC, RAAF (1892 - 1987). Photographed as a Lieutenant in the Australian Flying Corps in 1917.

endorsed texts on air power doctrine, the remarkably detailed and thoughtful essays and notes in those volumes demonstrate that the central concepts and operational practices of air warfare as they existed in the early 1920s were clearly understood by the RAAF. Thus Wrigley's notebooks merit attention not simply for their intrinsic historical value — which itself is considerable — but also as a *de facto* expression of early Australian air power doctrine. They provide an exposition of the RAAF's understanding of air power that previously had not been identified.

Henry Neilson Wrigley has perhaps not received the recognition his splendid career deserves. Born in Melbourne in 1892, he was a school teacher with the Victorian Department of Education before enlisting in the Australian Flying Corps (AFC) in 1916. He served with distinction as a pilot with No. 3 Squadron in France, eventually becoming the unit's commanding officer and winning the DFC. His book on No. 3 Squadron's operations in France, *The Battle Below*, published in 1935, was a valuable contribution to Australian Military history.⁴

Wrigley stayed in uniform after the war, and in November, 1919 made the first flight from Melbourne to Port Darwin to survey the route which was to be used by aircraft entered in the historic England to Australia air race. His pioneering flight across the continent remains one of Australian aviation's most notable achievements.

Following the disbandment of the AFC, Wrigley was commissioned into the Air Force as a Flight Lieutenant on the day it was formed. There were at that time only 21 officers in the Force. During those early years Wrigley filled a number of influential positions in RAAF Headquarters. He served on the staff of the First Air Member (Wing Commander R. Williams, later Air Marshal Sir Richard Williams),5 who was responsible for Operations and Intelligence, and from March 1923 to April 1925 was the RAAF Headquarters Training Officer. He was one of the first Australian officers to complete the RAF Staff College course, graduating in 1928, only four years after Williams. Promotion was regular, he became a Squadron Leader in October 1924, at which time the First Air Member was only one rank above him; and he reached the rank of Air Commodore shortly after the start of World War II. As an Air Vice-Marshal he became AOC RAAF Overseas Headquarters in London in 1942.

Given that background, it is reasonable to accept that Wrigley's extraordinarily fastidious notes would have been representative of the RAAF's central beliefs and an accurate reflection of its teachings.

The three volumes which contain Wrigley's work on air power doctrine were registered by the RAAF Museum as Access Nos 7089, 7090 and 7091. The items in those volumes are dated from 1915 to 1928 and appear to have been collected and written from the time of Wrigley's arrival in England with No. 3 Squadron in December, 1916 through to his attendance at the RAF Staff College in 1927-28. There is no particular structural order in the documents as presented in the three notebooks. Two categories

of document can be identified. First, there are essays and lecture notes prepared by Wrigley. The sources for those were the author's wartime experiences, official papers, existing public material on air power and the RAF Staff Course.⁶ The second category consists of transcripts of official orders, instructions and reports which were issued by the Royal Flying Corps and Royal Air Force during the Great War.

The documents examine, inter alia, the nature of war, morale, the development and theory of air warfare, strategy, concepts of operations and air combat tactics. Perhaps the most important document is a 25,000 word essay titled 'Some Notes on Air Strategy' which (the then) Flight Lieutenant Wrigley wrote in July 1923 when he was Training Officer at RAAF Headquarters. That essay draws together most of the stillevolving, and often contentious, issues surrounding this new form of combat power. It is accompanied by an excellent bibliography. While a number of the observations and comments recorded by Wrigley have been made elsewhere by others, his assume importance for Australian military history because they were made by a significant and influential RAAF figure.

Before examining the detail of Wrigley's work, a preliminary comment on the realities of developing doctrine is warranted. In view of the recent establishment after some 70 years of an RAAF Air Power Studies Centre, there is some ironic humour in Wrigley's note from the 1920s that an air force needs some sort of 'thinking department'.7 He based that conclusion on his wartime experiences. In his opinion, throughout World War I most of the aircraft were 'impossible to fight in'. As Wrigley recorded, those who should have been 'thinking these things out' were too deeply immersed in the daily routine, 'too occupied with coaxing aeroplanes into the air and teaching pilots to bring them down again without breaking their necks'. Consequently, doctrine suffered.

Notwithstanding the immediate and constant constraints imposed by operations, concepts on the use of the air weapon emerged rapidly during the war. Two of the earliest observations on the use of air power noted by Wrigley came from the Headquarters of the Royal Flying Corps (RFC), which at the time was based in France. On 22 September 1916, the commander of RFAC, General Trenchard, issued guidance on 'Future Policy in the Air', which Wrigley subsequently recorded approvingly.8. This

guidance addressed the question of whether combat aircraft should be used offensively or defensively, and examined in particular the tactics the British and French air forces were employing to try to prevent hostile aircraft from crossing the front and harassing observation flights. Trenchard's judgment was that, while the aeroplane had significant limitations in the defensive role, 'as a weapon of attack, [it could not] be too highly estimated'. The RFC's policy thus was to use the flying corps aggressively whenever possible. Recent French operations at Verdun during the winter of 1916 were cited to support that conclusion.

During the fighting at Verdun, the French initially had concentrated their aircraft into large formations and adopted a 'vigorous offensive policy', taking the fight to the enemy. Consequently, 'superiority in the air was obtained immediately', which in turn allowed the Entente's artillery cooperation and photographic reconnaissance aircraft to operate freely. However, a change of strategy saw that situation reversed. French army reinforcements began to arrive at the front and, as was the practice, each unit requested individual army support 'protective' aircraft. Their requests were met, and as its squadrons were dispersed the French Flying Corps surrendered its ability to concentrate force offensively. The French then found they were no longer able to dominate German air attacks. Eventually the mistake was recognised, air power was again concentrated in force, and the policy of the general offensive resumed. The enemy 'at once' stopped making hostile raids, having been forced onto the defensive. Thus, the French regained 'superiority in the air'.9

The emphasis on the offensive in that policy guidance was carried even further. RFC Head-quarters argued that should the enemy respond to an allied air offensive with similar tactics, then in turn the British and French should employ still greater aggression, increasing the scale of their offensive and going 'further afield' as a means of keeping the initiative.

That theme was expanded in a notebook entry titled 'Principles of the Action of Army Wings for Fighting Purposes', which was based on records dated April 1917.¹⁰ Wrigley noted that the fighting roles of the Army Wing (that is, the Flying Corps) were, 'pure and simple', either offensive or defensive. Of those options, the offence was the more important because the aeroplane was 'essentially a weapon of attack and

not of defence'. Artillery and photographic machines could be best protected only through intense and unremitting offensive activity on the part of the RFC's combat aircraft. Purely defensive action was incapable of achieving that objective. An air service's aim, therefore, had to be 'to obtain the initiative and put the hostile aviation service on the defensive'.

It is accepted that victory in war will at some stage necessitate offensive action. Wrigley's notes drew attention to the singular ability of an air force to take the initiative, particularly through its ability to concentrate force: as he recorded, 'the offensive implies concentration, the defensive necessitates dispersion'. His notes on the nature of air power established the connection between the offence as an essential condition of victory and the unique capability of an air force to concentrate combat power effectively.

If the relative merits of offence and defence have been perennial discussion topics in air forces, then so too has the debate about the control of air assets and independent operations, an issue on which Wrigley reported in detail. Command and control is a subject of direct relevance to doctrinal development because it is central to the employment of air power.

Perhaps the most influential report on the question of independent air operations was that handed down in two parts by the Smuts Committee in July/August 1917, and which led to the formation of an independent RAF. If the RAF had not been formed, it is unlikely that an independent RAAF would have come into being three years later, as only the world's second separate air force. Wrigley paid careful attention to the Committee's work.

The Smuts Committee was an unusual instrument formed in unusual circumstances. Consisting of just the South African statesman, soldier and politician, Lieutenant General J.C. Smuts, and the volatile Prime Minister Lloyd George, the Committee was established in haste in an atmosphere bordering on panic following the bombing of London in the preceding months. Cabinet perceived a need for urgent political action. It was also considered probably that in the near future all of the aircraft equipment needs of the RFC and the Royal Naval Air Service (RNAS) would have been satisfied and a surplus would start to accumulate, which raised the question of how best to manage the extra machines. The Committee's basic terms of reference thus were to report on the air defences



A German Gotha strategic bomber, as used in the daylight raids on London in mid-1917.

of the United Kingdom and the wider issues of the higher direction of the air services, which at the time were provided by the RFC and the RNAS.

As Wrigley subsequently recorded, under the existing arrangements the Air Board (which directed the RFC) was essentially subordinated to military and navy direction, a circumstance which made it 'useless' for the Board to try to put forward its own policies, derived from its specialist knowledge.¹² The Smuts Committee illustrated the untenable nature of that situation by contrasting the role of the air services with that of the artillery. Unlike the batteries of guns, which had no role outside their direct support of the land battle, an air service, using the unique characteristics of the aeroplane, clearly could play an independent combat role. Smuts and Lloyd George presented a neat example of independent air operations by citing the very raids on London that had instigated their report. In terms reminiscent of the early air power theorists, they further suggested the 'the day may not be far off ... when aerial operations ... may become the principal operations of war', with the older forms of naval and military actions becoming

'secondary and subordinate'. It seemed reasonable, therefore, that the merits of establishing a specialist organisation to manage that potential should at least be examined.

In the event, the Smuts Committee's comments on command and control were based squarely on the powerful argument of expertise. The matter was raised by posing the rhetorical question 'who is to look after and direct the activity of the surplus [aircraft]?' Answering its own question, the Committee declared that 'neither the Army nor the Navy was specially competent to do so', and for that reason the 'creation of an Air Staff for planning and directing independent air operations will soon be pressing'.¹³

In his biography of Lord Trenchard, Andrew Boyle has suggested that the Smuts report owed its acceptance as much to politics as to the persuasiveness of its case. 14 With the land war seemingly locked in an endless stalemate, Cabinet was looking for a way to 'curb' the 'strategic monopoly' of the Chief of the Imperial General Staff, Sir William Robertson, and the Commander-in-Chief in France, Sir Douglas Haig. Further, faced with a degree of public panic

following continuing bombing raids by the Germans against the UK, the Prime Minister was desperate for a strike force which would be 'liberated from the dead hand of Haig and capable of carrying the war into Germany'. General Smuts' biographer, on the other hand, has indicated that the report succeeded through the merit of its case, which rested in the dual needs of rationalising the wasteful competition between the RFC and RNAS, and establishing an organisation which could most effectively control and develop the great potential of the air weapon.¹⁵

Regardless of any political machinations which may have been involved, the case argued by Smuts and Lloyd George was at worst defensible and at best convincing; that is, the decision to establish a separate air force could fairly be justified. It was a decision based in part on factors which subsequently have been identified as 'tenets' of air power doctrine. As Wrigley's notebooks point out, while the profoundly depressing ground campaign was considered likely to continue to move at a 'snail's' pace in Belgium and France', the air battle front could be taken far behind the Rhine, bringing 'continuous and intense pressure' to bear against the Germans' chief industrial centres and lines of communications.16 A specialist organisation capable of conducting independent offensive operations was needed, not only to try to break out of the appalling mess on the ground in France but also to strike at the enemy in his homeland. An independent air force, utilising its inherent characteristics of mobility, speed, range and concentration of force, and operating under the control of specialists, was a logical solution.

For all that, ideas on the use of air power continued to be constrained by individuals' conditioning and preconceptions. It was felt in some Army and Navy quarters that the Independent [air] Force, which effectively started operations in October, 1917 and was officially formed in April, 1918, would be the first step towards an air service that would no longer meet its perceived raison d'etre, namely, the support of the other two services. According to Wrigley, the suspicion was held that the Air Force would carry out its operations without regard to the Navy or Army, or indeed Government policy, and would 'arrive from God knows where, drop [its] bombs God knows where, and go off again God knows where'. 17 He felt obliged to add that such ideas were entirely wrong.

The official establishment of the RAF in 1918 must be seen as a major acknowledgement of air power, and, by association, the evolution and logic of its doctrine. That doctrine encompassed not only the independent offensive operations sought by Smuts and Lloyd George, but also the seminal concept of 'control of the air'. Wrigley's papers recorded that development when he listed some 'notes on Recent Operations' prepared by RAF Headquarters in late 1918.

The concept was explained in the context of army cooperation. The main roles in which an air force could assist the army during a battle were listed as close cooperation with friendly cavalry, infantry, artillery and tanks; reconnaissance and photography; and destruction of enemy communications by bombing. In addition, air power could be used to attack troops and transport with bombs and machine gun fire, lay down smoke screens and drop supplies. It was pointed out, however, that the latter three tasks 'absorb' machines and 'reduce the offensive power of the RAF in the air', as a consequence of which they were justified only if 'superiority in the air is assured'.

RAF Headquarters noted that the campaigns of 1918 had again proven the value of a 'vigorous and continued offensive in the air' regardless of whether the army was advancing or retiring. However, the RAF expressed concern that the increasing demand for army cooperation was reducing its independent 'offensive power in the air'. As support for the land forces was directly dependent on the degree of freedom the RAF had to operate, the Air Force concluded that it was logical to give priority to establishing air superiority.

It is clear from Wrigley's notebooks that both the process which preceded the decision to form the RAF and its doctrinal implications were wellunderstood by the Australians who three years later were to be the first leaders of the RAAF. Wrigley identified those doctrinal issues most clearly in an entry in his notes titled 'The Air Force in its Role as a Separate Service'. He divided the evolution of air operations during the war years into four phases. Initially, he wrote, the aeroplane was regarded as merely an aid to army reconnaissance. It then acquired a more agressive role through its involvement in artillery observation and direction. The third phase came when indirect assistance was given to the ground forces by bombing enemy lines of communication. Significantly, for that task, it was not



An SE5 'control of the air' fighter aircraft.

necessary for the aircraft to be based near the front line — that is, near the army — nor indeed to be under the command of the army. Finally, with the establishment of the Independent Force, aircraft were used to assist the nation 'to impose its will upon the enemy people by action separate from that of the Navy and Army'.²⁰

That final phrase is, of course, a description of strategic bombing, which in turn provides the foundation for the relationship between air power and deterrence, and the notion of victory in war through air power alone. Through the use of strategic bombing, total warfare could now be waged against an entire nation, with the objective being the destruction of the national will-power rather than its army and navy. The effect of that relationship on concepts of warfare could fairly be described as dramatic. The Clausewitzian belief that victory could be won only by defeating an enemy's military power had been turned on its head.²¹

Equally dramatic notions for the employment of the air weapon emerged shortly after the Great War and were also noted by Wrigley. The catalyst this time was a series of campaigns conducted by the RAAF in the Middle East and on the North West frontier of India. Wrigley's observations were contained in a 'Precis of Lectures on Small Wars', which he compiled with the benefit of the lessons learnt by the RAF from actions in Somaliland in 1920, Iraq in 1923, Waziristan in 1925 and the Sudan in 1928.²²

In 1921, acting on the advice of Trenchard, Winston Churchill as Minister for War and Air had given the responsibility for defending Imperial interest in Iraq to the RAF, in lieu of the Army. Churchill's decision was based partly on a wish to save money — Britain had been maintaining a force of 60,000 soldiers in Iraq in 1920 and was still unable to suppress rebellion — and partly on Trenchard's assurance that Imperial authority be enforced through 'Air Control', 23

As well as exploiting the special characteristics of the air weapon, Air Control or the 'Air Method' of policing territories relied heavily on the 'moral effect' of a population's fear of aerial bombardment. Before an errant tribe or community was actually bombed, well-defined procedures were followed, with a sequence of warnings being given, often by proclamation dropped from the air. If that procedure did not work, a 'punishment' air raid was carried out.

Air Control amounted to the substitution of air power for land power. The technique was highly successful, drawing praise from such a significant and impartial figure as Sir Henry Dobbs, High Commissioner for Iraq from 1923 to 1929.24 Not surprisingly, however, the 'substitution debate' as it became known also generated the most intense opposition from Naval and Military quarters. That did not deter Trenchard, who in 1929 prepared a paper titled The Fuller Employment of Air Power in Imperial Defence. According to Sir John Slessor, the paper 'fairly took the gloves off' by declaring 'unequivocally the belief of the Air Staff that real economies with at least no less efficacy could be secured by the substitution of Air Forces for other arms over a very wide field'.25

Wrigley wrote in some detail on the importance of the psychological effect of air control. He drew a connection between that effect and Australia's defence needs, noting that because the 'application of [the] Air Force' primarily produced a 'moral' effect, it was important to employ air power quickly. In turn, that made it essential for squadrons to be part of an organisation which both understood and could exploit that characteristic.

That fundamental organisational principle was accompanied by a significant tactical consideration which, like the observation on organisation, also amounted to an article of air power faith. It was essential, Wrigley recorded, to preserve the mobility of the air force, not only through an enlightened command and control system but also through force disposition. In a passage reminiscent of Australia's current strategy of constructing a string of 'bare base' deployment airfields across the north of the continent, Wrigley's notes pointed to the need for 'an organisation of landing grounds to any of which air units can be moved by air'. From those landing grounds the 1920s equivalent of Australia's present 'bare base' strategy would then have been followed, with the air force units concerned operating from their own resources, resupplied from the air 'until they can be reinforced by other

Numerous conclusions can be drawn from Wrigley's notes. The most important here is that

his work amounts to a *de facto* form of doctrine. The contemporary maxims of air power can be seen in his observations, each one of which was derived from the unforgiving testing ground of combat. The terminology may have changed, but concepts such as offensive operations, concentration of force, specialisation, substitution, the importance of establishing air superiority, joint operations, balance, the ability to conduct concurrent campaigns (indivisibility of control) and independence have not.

NOTES

- It was not until August 1990 that the RAAF published it own doctrine; see AAP 1000, The Air Power Manual
- RAAF Historical Section (RHS) RAAF HQ Memorandum Regarding the Air Defence of Australia, 21-4-25; Australian Archives (AA), A5954, Box 786, The Five Years' Defence Program 1924-25 to 1928-1929; The Sun, 5-7-35.
- Air Marshal R.G. Funnell, The Royal Australian Air Force: A Small Air Force and its Air power, the 1987 Sir Ross and Sir Keith Smith Memorial Lecture.
- 4. H.N. Wrigley, The Battle Below, Sydney, 1935.
- Air Marshal Sir Richard Williams, KBE, CB, DSO, was the RAAF's first CAS and its dominant personality from its formation in 1921 until his retirement in 1946. He published his autobiography, These Are Facts, in 1977.
- 6. Wrigley benefited from lectures given at the RAF Staff College by some notable contributors to concepts of air power; these included Air Commodore R. Ludlow-Hewitt; Wing Commander T.L. Leigh-Mallory; Air Marshal Sir John Salmond; Air Vice-Marshal Sir J.M. Steel; Air Vice-Marshal Sir R. Brooke-Popham; and Wing Commander D.C.S. Evill.
- RAAF Museum (RM), Acc. No. 7089, Wrigley Notebooks. 'Precis of a Lecture on the Development of Cooperation with the Army during the War of 1914-1918'.
- RM, Acc. No. 7091, Wrigley Notebooks, Appendix 59, 'Future Policy in the Air'.
- 9. loc. cit.
- RM, Acc. No. 7091, Wrigley Notebooks, Appendix 62, 'Principles of the Action of Army Wings for Fighting Purposes'.
- RM, Acc. No. 7090, Wrigley Notebooks, 'Some Notes on Air Strategy', July 1923.
- RM, Acc. No. 7091, Wrigley Notebooks, Appendix 76, 'Extracts from a Report by General Smuts on Air Organisation and the Direction of Air operations'.
- 13. loc. cit.
- 14. A. Boyle, Trenchard, London, 1962, pp 229-38
- 15. W.K. Hancock, Smuts, Vol. 1, Cambridge, 1962, pp 438-42. It is noteworthy that, during a discussion in the Council of Defence on the independence of the RAAF some 12 years later, Prime Minister Scullin 'intimated that, on advice he had received from abroad, Britain had saved millions of dollars by the creation of a separate Air Force'.
 - AA, A5954, Box 762, Council of Defence, 12-11-29.



The F-111C - The RAAF's front line strike aircraft of today.

- RM, Acc. No. 7091 Wrigley Notebooks, Appendix 76, 'Extracts from a Report by General Smuts on Air Organisation and the Direction of Air Operations'.
- RM, Acc. No. 7090, Wrigley Notebooks, 'The Air Force in its Role as a Separate Service', qv Sir Frederick Sykes, From Many Angles, London, 1942, pp 215-268.
- RM, Acc. 7091, Wrigley Notebooks, Notes on Recent Operations prepared by Headquarters RAF*, probable date of the notes listed as October 1918.
- 19. loc. cit.
- RM, Acc. No. 7090, Wrigley Notebooks, 'The Air Force in its Role as a Separate Service'.
- See C. von Clausewitz, On War, Harmondsworth, 1982, pp 122-27. On War. first appeared in 1832, one year after its author's death. Its influence on strategic thinking has been profound.
- RM, Acc. No. 7089 and 7091, Wrigley Notebooks, 'Precis of Lectures on Small Wars', and Appendices 193-4-5.
- Marshal of the RAF Sir John Slessor, The Central Blue, London, 1956, pp 45-75.
- 24. AA, A5954, Box 39, Views on Air Control.
- Slessor, op cit., p 70. qv RM, Williams, Papers, Correspondence with Trenchard and Trumble in London. Trenchard to Williams, December 1926.

Air Commodore Brendan O'Loghlin is Director General, Military Strategies and Concepts in HQADF; before that he was the first Director of the RAAF Air Power Studies Centre (APSC). Wing Commander Alan Stephens is the Research Fellow at the APSC. An edited volume of Air Vice-Marshal Wrigely's notebooks, titled The Decisive Factor, which was published by AGPS Press late in 1990.

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Book Reviews

MORE THAN G'DAY: A GUIDE FOR PEO-PLE WORKING WITH OVERSEAS STU-DENTS. By Kenyon C. and Amrapala A., Aristoc Press, Victoria, 1990.

Reviewed by Major B.D. Copeland, BA., BEdSt., RAAEC.

This booklet has been written to prepare Australian institutions for the task of supporting students from Asia and the South Pacific who attend educational and training courses in this country.

The booklet has the intention of sensitizing Australians to the pressures and ongoing needs of foreign students upon arriving in a strange country and in spending an extended period in an Australian institution.

Emphasis is placed upon the range of cultural differences that will exist among foreign students. These differences have been explained carefully to the reader, though little attempt has been made to relate these differences to specific cultures.

The section on religion (pp 32-36) sets out clearly certain aspects of Buddhism, Islam and Animism. These aspects provide useful insights for Australians.

The description of Animism presumes much on the spiritual outlook in the South Pacific. No mention is made of the strong influence of Christian ethics in the region. It is as if this does not exist at all.

Emphasis is also placed on the range of institutional aspects that need to be considered to help foreign students with their day-to-day affairs.

The booklet offers much but does not live up to its promise. There are so many basic flaws to be found.

Students to Australian training and educational institutions come from Asia and the South Pacific. Yet most of the insights appear to be based on cultures within Asia.

The booklet is confusing in the attempt by the authors to cater both to civilian and Service schools. The two scenes are very different.

Considerable preparation is carried out under the Defence Co-operation Programme for foreign Service students. Emphasis is placed on the onset of "culture shock" with the implication that this is an unavoidable and pervasive condition among incoming foreign students.

A picture is painted earlier in the booklet of a lonely student arriving in an unfriendly and scarcely comprehensible country. This person is certainly a distinct candidate for "culture shock".

Such a situation does not necessarily apply to personnel of foreign Defence Forces. Such personnel often arrive in a group which provides identity and, at times, a rank structure.

The main source of foreign Service students is the Papua New Guinea Defence Force. This booklet purports to advise on foreign students. Yet, in relation to Papua New Guinea and indeed, all nations of the South Pacific, much of the specific advice is totally wide of the mark.

Not one of the "Social taboos" (p39) apply to the people of the South Pacific. Indeed, some do not even apply generally in Asia. There is considerable danger in providing a prescriptive inventory of "Do's" and "Dont's". A little knowledge is a dangerous thing, particularly if generalized from the specific.

Advice is given not to use red ink on students' work. Australians are not to wink at foreign students and must maintain eye contact during conversation.

Such advice is so culture specific as to be totally unhelpful. There are people in Asia and the South Pacific who avert their eyes as a sign of respect, to name one aspect.

Advice is given (p70) that, in most countries of Asia and the South Pacific, military officers can avoid obeying rules and regulations both civilian and military. This is a generalization that should not be made and, even less, put to print.

The point is made that "an occasional senior officer may still feel that he can use his rank to his advantage" in an Australian Service School. Advice is given that the facts of life be pointed out during the orientation programme. This is both dangerous and foolish advice with the potential to cause harm.

Does this give a welcoming officer the moral authority to announce to the gathered throng of incoming foreign students that senior officers should not pull rank because that is not the way we do it in Australia? This booklet has the potential to promote naivety and stupidity on this crucial representational matter.

The booklet gives some advice on aspects of training. Some emphasis is placed on class room performance of instructors and students.

At the same time, no attention is paid to the preparation of readily comprehensible text books and comprehensive exercises in mastery learning.

Passing reference is made to technical "cause" and "effect" relationships. We are advised that we "need to exercise some restraint in not laughing at some of the explanations" by foreign students (p37). This is quite curious advice.

The most practical advice for schools is that 25% more time be allocated for foreign students to complete examinations. As well, foreign language dictionaries should be allowed during tests and examinations. This is very arbitrary advice, divorced from reality.

The authors ignore the total range of advice and support already applied within Australian Service Schools. This includes oral exams, focus upon practical tests, a language teaching component on technical courses, emphasis on short answers and application of "mastery learning" techniques.

The booklet certainly provides a wide range of ideas but falls short of the existing range of practical training advice.

Any such booklet requires sensitivity in its writing. There are lapses in the presentation of argument in the present booklet. Some sentiments could be regarded as offensive if read by an officer of a neighbouring Defence Force.

This booklet has much to offer. The main failing is that, among perfectly sound advice, there are ideas presented that are naively candid and poorly generalized.

I conclude with a quote: (p39). "Do not insist on students intermingling if you are aware of any problems with their personal freshness."

The booklet should not, in its present form, be put forward as an official text within the Australian Defence Force.

SKY PILOT, by Peter A. Davidson. First published in 1990 by the Principal Chaplains Committee — Air Force. ISBN 0 7316 4982 4. Available from RAAF Base Chaplains in all States — Price \$12.00, or from the Australian War Memorial, Canberra ACT — Price \$17.95.

Reviewed by Air Cdre. C.R. Taylor, CBE, RAAF, RET

The composition of and relationships within an Air Force can be likened to the makeup of a dramatic theatre.

The aircraft and supporting weapons equipment are the stage settings and the props. The pilots are the principal actors and the other members of aircrew form the supporting cast.

The ground staff, representing a wide range of technical and adminstrative skills, are the directors, theatre mechanicians, stage hands and supporting administrative staffs who provide the essential back-up. Without these people, a theatre performance could not be presented, and an Air Force could not effectively perform its alloted operational offensive and defensive roles.

Unlike the theatre, however, an Air Force has an added responsibility for both the physical and the spiritual welfare of its members and deep behind the scenes are other equally important and essential serving members such as Medical Officers and Chaplains whose task it is to provide their professional care to all ranks whenever a need arises. It is the history of the RAAF Chaplains Branch, and the wonderful work performed by its members, that forms the basis of Peter Davidson's *Sky Pilot*.

As the author emphasises, the history of Chaplaincy in the Royal Australian Air Force from 1926 to 1990 is not so much about individuals, but is the story of chaplaincy as an essential service in its widest sense.

The book, which marks the 50th Anniversary of the foundation of the Chaplains Branch within the RAAF, opens with a foreword by the Chief of the Air Staff, Air Marshal R.G. Funnell, AC and is followed by an informative preface by the author who is a serving full-time RAAF Chaplain.

In fifteen meticulously researched and well illustrated chapters, Peter Davidson holds the attention of the reader with his fascinating accounts of the devoted, dedicated and caring concern of the Chaplains of all religious denominations for the practical and spiritual welfare of serving RAAF personnel and their dependant families, both in peace and war.

Commencing with the formative period from 1926 to 1939, he carefully traces the work of the RAAF Chaplains in Malaya from 1941-1942, in the Middle East and the Mediterranean from 1942-1945, and in the U.K. throughout the duration of World War II.

The story continues with the scene at Operational and Training Bases in Australia and with graphic descriptions of the work of RAAF wartime Padres in the various Pacific theatres where the RAAF was prominently represented from 1943-1945.

In the final chapters, the story of RAAF chaplaincy post-WWII is described including work with the Japan Occupation Force, the Korean and Vietnam wars, and the consolidation of the RAAF during the relative period of peace which now prevails.

Throughout the book, Padre Davidson has skilfully mixed individual and collective accounts of comedy and tragedy, pathos and sympathy, and joy and sadness. These incidents may well remind the serving and ex-service readers of some time in their own life when a Chaplain was the only person they could turn to for advice and guidance.

As a retired RAAF officer whose regular service extended from 1934-1971, I will remain ever grateful for the personal friendship and wise council of numerous Chaplains of various denominations, especially during those periods as a Unit Commander.

Peter Davidson has thoughtfully concluded with a roll and the service record of all RAAF Chaplains from 1926-1990 and he is to be congratulated not only for his diligent research, but for producing such a timely and highly readable history of RAAF Chaplaincy. A special form of ministry embracing an 'ecumenical brotherhood' of outstanding men whose common desire has been to practice faith, hope and love among their Service brothers and sisters.

Indeed, this book is so good that I am surprised it was not published by the Department of Defence in a more durable and conventional form.

THE SKY SUSPENDED — A FIGHTER PILOT'S STORY, by Jim Bailey. Bloomsbury Publishing, 1990. Originally published: *The Sky Suspended* — *The Analysis of a Flying Experience 1940-45* by Hodder & Stoughton Ltd, 1964.

Reviewed by Wing Commander, Ian MacFarling, RAAF.

Many books and reminiscences have been published about the Battle of Britain and the events that saw the Royal Air Force hailed as the saviour of the civilised world.

One of the books available is a reprint of a South African scholar's memoirs that cover not just the Battle but also the whole of World War Two. Jim Bailey was a 19 year old student at Oxford in 1939 and joined the University Air Squadron "... because the food was reputed to be good there." He became a pilot and, after the fall of France, was posted from army cooperation Lysanders to fighters which he flew, interspersed with rest periods, throughout the war. A variety of aircraft passed through his hands including Hurricanes, Defiants, Beaufighters and the amazing Helmore. The Helmore was a modified Boston bomber which had half a ton of batteries in the bomb bay and a forwardshining fixed searchlight in place of the perspex nose. In nightfighter operations you illuminated the enemy with the light and the fighter (usually a Hurricane) that was with you shot him down. This was not a success. The new nose was flat, the drag phenomenal and the batteries would kill you from behind if you crashlanded. Nightfighter techniques have improved a bit since then.

Jim Bailey is a modest man. He shot down ten enemy aircraft and won a DFC, but you have to search in other books to find this information. He is gregarious, finding pleasure with ordinary people as well as with the famous of the day who included Richard Hillary, Bob Braham and Guy Gibson. Group Captain Peter Townsend, war hero, equerry to King George VI and close confidant of Princess Margaret was a wartime friend who twenty five years later wrote the foreword to this book.

The Sky Suspended is a pleasure to read with its gentle skepticism masking a stoic courage similar to that personified by the "mercenaries" in Housman's poem from which the title is derived. The descriptions of people, places and events, such as witnessing the loss of a friend in a crippled aircraft that ditches in mountainous green seas, are always clear and precise with the unpleasantness of war driven home by the author's calm unhurried tone.

It is, nevertheless, a man's book. Very few women are mentioned. The author's mother, who has more flying hours than her son and wanders from flying mishap to flying mishap, appears more to stress the masculinity of the war than to provide a feminine perspective. Also, both Jim Bailey and Peter Townsend have a perception of women that might seem dated to modern readers. Townsend writes beautifully in the forward, describing in one part being shot down

by an ME110 fighter. The bullets pass around him in apparent slow motion and in the destruction "... I muttered 'Christ' ... but in a hushed voice, so that the ladies would not hear, as if I had spilled tea on the drawing room carpet".

Bailey writing the book in conservative South Africa in 1964 originally called the manuscript Eskimo Nell (do you remember her chronicles recited in the afterglow of Rugby post-match parties!?) and makes scandalous comments such as"... Genius, I opine, is bred of the marriage of angels to fallen women." The handsome, independent and self assured women who (hopefully) have replaced both "ladies" and "fallen women" in the 1990s would probably say a lot more than "Christ" and say it very loudly if such a comment were made today.

The Sky Suspended is a book worth owning, It recreates the tone of the war and gives a useful historical picture of the men who were part of our Air Force heritage. If there is an omission in the 1990 edition it is the lack of a recently written epilogue. Cecil Lewis wrote one for Saggitarius Rising when his personal account of air combat in World War One was republished forty years or so after the first edition and it enhanced the book. This is not a real criticism, but the blurb hints at post-war liberal aniapartheid activities, which probably required as much courage as six years of air combat, and it would have been good to know what happened to this sensitive man who wrote such a splendid book.

THE SPIRIT OF ANZAC. Illustrations by the Defence Artist Jeff Isaacs. Narrative by Michael Tracey, Managing Editor of the Defence Force Journal. Published by The Department of Defence. Price: \$9.95 plus P&H

Reviewed by John Buckley, OBE

In writing the foreword to this book, the Chief of the Defence Force General Peter Gration, said interalia: "Attending the 75th Anniversary of the landing at Anzac Cove was one of the highlights of my service career. A memorial service at the site of an event which is etched so deeply in the national consciousness has always been a moving experience for Australians, but the presence of 58 World War I veterans made 25 April, 1990 unique. . . . This book serves as

a fitting memento of this important, historical occasion."

The book is a most important and very valuable contribution to the 75th Anniversary of Anzac and indeed, to the recording of Australian military history for posterity.

As a one time senior civilian officer of the Defence Department, I am more than impressed by more recent efforts of the Department to foster and record important historical occurrences. Unfortunately, it did not happen in my 24 years as a Senior Executive nor did the Department have a top Managing Editor or a top class Artist on its staff. More's the pity!

Mike Tracey and Jeff Isaacs are well known throughout the Services for their previous outstanding publications including Jeff's masterpiece, "Australian Defence Heritage" a portfolio of historic forts, barracks and defence buildings. There are many others. This time, they have excelled with *The Spirit of Anzac*.

Tracey and Isaacs were at Gallipoli for some time preparing the excellent paintings, illustrations and narrative which are included in this outstanding book. The story starts with a short precis of the Gallipoli campaign in 1915; then the preparation for the 1990 pilgrimage; the commemorative services; the legends graphically illustrated in colour; the war cemeteries; the memorials; all in a blaze of natural environment and dignity. Some arouse emotion, pride and sorrow.

The book does not overlook our Turkish friends — special mention is made of some old soldiers and their famous commander, Mustafa Kemal Ataturk.

The Australian services will be proud to read some of the dedicated and impressive performance of our Navy, Army and Air Force at the various ceremonies.

All told, it is an inspiring book which captures the whole atmosphere of an emotional and dedicated event which commemorates what many believe to be the beginning of Australian Nationhood.

The book will have great appeal to members of the R.S.L. and ex-servicemen and women. Its price is rock-bottom, obviously subsidised by the publisher and an equivalent production would cost double or treble the price.

In conclusion, Tracey and Isaacs have produced a most excellent, historical publication with a most attractive and picturesque set of paintings

and illustrations. And a dignified, outstanding and interesting narrative.

Congratulations to the Minister, the Chief of the Defence Force and the Department of Defence for its foresight in preparing and publishing this excellent record of the 75th Anniversary of Anzac.

I strongly recommend this excellent book.

HURRICANES OVER BURMA: The Story of an Australian Fighter Pilot in the Royal Air Force, by Squadron Leader M.C. Cotton DFC. Published by Titania Publishing Co. Oberon, NSW.

Reviewed by Wing Commander Ian MacFarling, RAAF.

Most of the military books available today come from the large, powerful publishing houses of the Northern Hemisphere or their Australian subsidiaries, so the product of a very small, unknown company is an intriguing prospect — will it be remarkably good or unreadable?

Hurricanes over Burma thankfully is a good and also an historically useful book. The manner of its production — desktop publishing on a personal computer — reflects the drive and independence of the author who is also involved in its publication. The book is based on the letters written by Squadron Leader Cotton to his parents over a five year period and includes a large number of photographs: photography has been a life long passion for the author.

The narrative covers the wartime experiences of a confident and capable young man who was selected to be one of the first forty Australians trained under the Empire Air Training Scheme in Canada. He completed that successfully and then went to England where he learnt his craft as a fighter pilot before being posted to Burma. He rose to command a squadron flying Hurricanes before being struck down with dysentry which ended his combat flying.

There are several points that catch the reader's eye. Firstly there is the air fighting over Rangoon and northern Burma where the RAF and Chennault's American Volunteer Group tried to stop the Japanese. The Japanese success in the 1942 campaign has tended to diminish the bravery and professionalism of a small group of men; perhaps failure is unpalatable to those controlling the news.

Secondly, the conditions in Burma and North East India were so bad it is amazing that anyone achieved even a limited measure of success. Lastly, the sacrifices made in World War Two are amazing. 18 of the first 40 EATS cadets were killed, four were wounded or became ill, seven were taken prisoner and members of the group received 12 decorations. This testament to Australian youth, vigour and courage sits in stark contrast with the shameful behaviour of senior Australian airmen who seemed to concentrate more on personal ambition and petty power plays at home rather than prosecuting the war successfully against the nation's enemies abroad.

I hope the book is successful. It deserves to be. Also, I hope all of the material which was drawn on to produce the work will be made available to historians. Primary sources of information are vital for obtaining an accurate picture of Australia's past. Squadron Leader Cotton's book and his personal archives are an invaluable contribution and he must be congratulated for his efforts.

