DEFENCE FORCE JOURNAL

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An F-111C of 1 Squadron, Royal Australian Air Force, in afterburner above RAAF Amberley, Queensland.
IT is with great regret that we heard of the death in South Australia of Brigadier J. H. Thyer, CBE, DSO, (RL), at the age of seventy-nine.

Jim Thyer was a prolific writer of great clarity and purpose, belying his advanced years with his grasp of contemporary military problems. Several of his articles appeared in the Army Journal. His “Foreign Policy and a Credible Defence,” (Army Journal, No. 312, May 1975) won the annual award for the best original article.

His foreword to the book “The Grim Glory of the 2/19 Battalion, AIF” appeared in Army Journal, No. 325, June 1976. It was a piece he was well qualified to write, as he was Colonel GSO1 of 8 Australian Division when that ill-fated formation, of which 2/19 Battalion was a gallant part, was attempting to stem the advance of the Japanese into Malaya and Singapore. He spent three years as a prisoner of war in Changi. Of those years and on behalf of those who did not survive their terrible privations, he wrote, “The sacrifice of our people will not have been in vain if we see to it that those we elect to lead us, now and in the future, adequately fulfil the moral obligations of their high office and do not barter our security for a mess of potage.”

Brigadier Thyer retired from active duty in 1945, but maintained his interest in the Army as, at various times, Representative Colonel Commandant, Royal Australian Corps of Signals, and Colonel Commandant, Central Command, a position he held for ten years from 1957 to 1967. His forceful pen and alert mind will be sadly missed in Australian Military Literature.

We extend our deepest sympathy to his widow and family.

In this issue we are attempting an experiment suggested by a reader, in bringing the “Letters to the Editor” forward to the front pages in the hope that there they will assume their rightful importance as a forum for informed debate.

At the request of the Officer Commanding, Audio Visual Unit, Fyshwick, in future issues the name of the Staff Artist, Mr David Hammond, will not appear on the inside cover. This is because several other members of the unit have lent their skills in producing the artwork to illustrate articles. Where appropriate, however, the individual artist will sign his or her work.

The number and quality of articles received in this office is encouraging, but there is always a requirement for more from all sections of the Defence Community. Every endeavour is being made to keep a “balanced” journal. However the success or otherwise of this policy depends upon a like balance in the material received. The fervent wish of your Editor is to see the encouraging trickle of articles turn into a mighty flood, providing powerful ammunition for turning the Defence Force Journal into a monthly publication; in the words of Hamlet “...a consummation devoutly to be wished.”
CAN AUSTRALIA SURVIVE?

Major Black's study of plans for the land defence of Australia before and during the Second World War poses the question, "The Second Time Around. Can Australia Survive?" (Defence Force Journal, November/December 1976). He may have his history right but there are aspects of the preface to the article and a section headed 'lessons we cannot afford to forget' which invite comment.

The preface contains several dubious assertions. Major Black appeals to the so-called 'lessons of history' in a way which assumes an inevitability and logical pattern in history — a determinism about the future course of events. It seems that Marxists are not alone in wishing to impose a pattern on history! In the preface we are told 'It is totally illogical to pretend that other nations will not covet our resources . . . ; it defies all precedent in the history of the causes of armed conflict'. There is an ' . . . unpredictable but nevertheless inevitable threat to our national survival . . . The broader lessons of history dictate that time is running out'.

Apart from his historical determinism Black may also be challenged on the question of the "broader lessons of history" — which in this case the reader is to conclude are that resource-rich but militarily weak countries are invariably subject to invasion. During the 19th Century many wealthy but weak states in North and South America seem not to have fallen prey to foreign attack. Perhaps the United States was protected because of the lack of effective strategic 'reach' by potential aggressors and the remainder by the Monroe doctrine. Trade and economic penetration were seen as alternative means by which major powers gained access to the continent's resources. One might ask why trade and economic penetration rather than conquest might not continue to be preferred in the case of Australia? The combination of economic wealth and military weakness may often have been a cause of conquest but is it a universal law that the one necessarily follows the other?

The inevitability of the 'resources-grab' is fast becoming part of the theology of Australian defence thinking. For many it has replaced that earlier leit-motiv, the downward thrust of asiatic communism — a piece of conventional wisdom which now seems increasingly to have been based on a rather inaccurate and incomplete understanding of events and their causes. Is there not a risk that we are about to fall for a second set of defence assertions, dressed up in the 'lessons of history' and 'logic' without first testing their validity? Perhaps this exhibits an aspect of our national psyche. Several years ago Michael Howard observed that Australians were addicted to manufacturing 'threats' — in a way the western Europeans found unnecessary — in order to justify defence preparations.

The difficulty with basing defence thinking on the 'lessons of history' is that there can be no certainty as to what they are or will be next time — in many cases, like beauty, they are in the eyes of the beholder. Black claims for instance that judged in the balance of history each (Australian expeditionary) commitment was made to establish and preserve Australia's position as a separate nation in the world community. It is his judgement evidently that Australian intervention in Vietnam contributed positively to our security. Many would dispute that.

An appeal to the 'lessons of history' by many with a defence barrow-to-push seems to be an attempt simply to make a respectable argument for large, or larger forces — to meet the 'inevitable' threat. The 'lessons of history' are also comforting because they return us to the concrete, knowable past, and to the alleged relevance of our military history. But one could perhaps advance another 'lesson' from the history of warfare this Century: it is that major wars have each been profoundly dissimilar in their conduct and consequences.
The rate of change in the world’s politics, society and technology suggest that there are more surprises ahead of us.

No doubt defence planning is much easier (if not more successful) if continuity rather than change in warfare is emphasised. There is another way to make planning more manageable and that is to make the world smaller.

Are defence planners, transfixed by maps which show only the continent of Australia, already retreating further into the Looking-Glass? There is a wry tale that Australia’s post-war foreign and defence preoccupation with South East Asia — our ‘friends and neighbours’ binge — was the consequence of a cartographic accident. The Department of External Affairs was supplied only with maps which showed Australia and South East Asia. Our world-view was limited. Today’s enthusiasm for maps of Australia gives rise for new concern. The threats and answers to Australia’s national security are unlikely to be found within it. At best the new fad has generated a parlour game which may eventually rival ‘Diplomacy’. (The outline for the game ‘Defeating the Enemy in the North West’ seems to include: no nuclear weapons and no allies allowed against the mysterious, non-super power but formidable enemy.) Just why the enemy seems to prefer the Pilbara to Collins St., Port Kembla and Russell Hill is never made very clear.

Our comparative geo-political and cultural isolation allows us all too easily to forget that our national security extends beyond a map of Australia to factors such as trends in world politics, changes in the military balance of the super powers and military technology, among many others. It was of course world events not regional issues that involved us in two world wars. It is to these sorts of issues and problems that military analysts should also be turning their minds before the Looking-Glass reveals only the ‘Pilbara Syndrome’. Here Major Black is innocent. He does emphasise that our strategic heartland remains in the South East. He does however take up the neo-isolationist call for once quaint now trendy ‘self-reliance’. He asserts (p. 17) that ‘Any plan which relies on a powerful ally to play the principal or even a major part in the defence of this country is unsound’. If he is worried that ANZUS has no ironclad guarantees, let us also have his analysis of the considerable economic and social costs of self-reliance instead of collective security. By logical extension he would also need to argue that the defence plans of the non-super power members of the NATO and Warsaw alliances are unsound. Such a general proposition of self-reliance seems to lead all the way to a kind of ‘Garrison State’ which would be defensible even against super power attack. But would such a society be worth living in?

Department of Defence
Paul Mench
Canberra, ACT

The article by Major A. R. Black entitled “The Second Time Around. Can Australia Survive?” (Defence Force Journal, November/December 1976) uses material which, although it is not new, has not been widely discussed in Australia. It provides a neat and illuminating account of Australian defence planning before and during World War Two and draws attention to the lessons of the period. It would be presumptuous of me to re-emphasise the necessity to heed the lessons. The events of 1941-42 must serve as our most relevant model.

Nevertheless Major Black, in passing and without contributing to his logical and clearly expressed paper, makes a comment which, in defence of the Australian generals, I feel must be clarified. He puts particular stock on General MacArthur’s directive of 25 April 1942 and concludes that “MacArthur apparently placed more emphasis on denying the enemy bases in north-eastern Australia and New Guinea than had the Australian planners to this time”. I hope that Major Black has not been influenced by MacArthur’s false claims that upon his arrival in Australia he decided to abandon the Australian defensive plan and to take the fight to the Japanese in New Guinea.

The Chiefs of Staff appreciations of December 1941 pointed to the importance of defending the North Eastern Approaches but recognised that the area could not be adequately defended for a number of reasons. Firstly, the trained troops were not available. The militia had only just been called up and they were ill-equipped; indeed the equipment was not available. Secondly, there were few
airfields in the area. Thirdly, there were very few aircraft to use the limited airfields in the area. Fourthly, if land forces were moved to the area they could not have been adequately supported by air and naval forces, and they would therefore have been vulnerable to Japanese assaults. A strong land force at Port Moresby could have done little to prevent a Japanese naval force approaching Brisbane had that been the Japanese intention.

However, as the level of training and equipment improved the army was able to progressively move northwards. This was stressed by Blamey in his first operation instruction of 10 April 1942 in which he stated that he thought that the first Japanese southward movement would be directed against Port Moresby. The assessments made by the Australian defence planners during the first four months of 1942 compared more than favourably with those prepared by their American Allies. One American plan prepared in March 1942 suggested that a defensive line should be prepared across Australia based on three positions:

- a. In the east, along the general line west from Maryborough in Queensland.
- b. In the centre, along the MacDonnell Range north of Alice Springs.
- c. In the west, along a general line north of the line Lowlers, Mt. Magnet, Geraldton.

By April 1942 the 7th and part of the 6th Divisions had returned to Australia. A US Division had arrived in Australia and another was on the way. The level of training had increased and a US Naval force was operating in the South West Pacific. The defence of North East Australia, which had already been recognised as important, was now closer to being feasible. The plans to shift the defence emphasis to the North Eastern approaches, which had been foreshadowed by Sturdee and the War Cabinet in March 1942, could now be executed.

The evidence that MacArthur placed more emphasis on the area than the Australians is tenuous. But even if it was true that MacArthur had placed more emphasis on the area, this should not be seen as an indictment of the Australians, for MacArthur had access to intelligence which the Australians hitherto had been denied. About this time American cryptanalysts began to break the Japanese codes. MacArthur's directive of 25 April 1942 was a direct response to information that the Japanese were planning to attack Port Moresby and then follow this with an attack on the north-east coast of Australia. It is so much easier to make your plans if you know what the enemy is going to do. Yet despite his directive, MacArthur made no effort at this stage to have additional infantry moved northwards in Australia and into New Guinea.

MacArthur's claims have taken many years to refute, but books like Gavin Long's MacArthur as Military Commander have contributed to rectifying the misapprehensions caused by the Commander-in-Chief and his flattering subordinates. It would be a pity if the great panjandrum were to get away with it again.

First Battalion
The Royal Australian Regiment D. M. Horner
Laverack Barracks, Major
Townsville, Qld. RA Inf

ARMOUR THREAT

I congratulate Captain R. J. Linwood on his well researched and thoughtful article "Put your Head in the Sand — Here Comes Their Armour", (D.F.J., November/December 1976). The need for infantry to be capable of repelling armoured attack from their own resources is a matter requiring early resolution.

The RAAC, like any armoured corps, has a natural pre-occupation with the threat of enemy armour because it is a fundamental principle that its survival and capacity to operate uninhibitedly in a mobile role depends on the early elimination of that threat. Inevitably and properly the RAAC possesses the most knowledge of the subject and would play a major part in dealing with the eventuality.

Out of our infantry's necessary and prolonged pre-occupation with counter-insurgency, however, an attitude has emerged that the RAAC is the cure-all and you can refer the problem to it as one would refer rat infestation to a pest control specialist. If, however, the specialist is busy elsewhere exterminating an even larger gathering of rats, it is to be hoped that you had the forethought to lay in your own rat-traps and not merely mouse-traps.
The inadequacy of battalion weapons has been glossed over for too long in our training institutions and our thinking. We are slowly progressing from the thinking of the middle 60s when one Chief Instructor of the Infantry Centre taught his officer-students that the Carl Gustaf was the ultimate weapon and tanks could be disregarded thereafter. Nevertheless, the head-in-the-sand, send-for-the-ratcatcher philosophy is still with us, lying just concealed in the thinking behind TIB 28, (The Infantry Division) and surfacing from time to time in discussions on tactical exercises.

In 1964, infantry instructors were posted to the Armoured Centre for the ENTAC trial and subsequently as instructors in the ATGW Wing. Their presence was regarded as significant by the RAAC but with apparent indifference by their parent corps, probably because of its Vietnam commitments. As one who remembers their realization of the scope of the problem and their enthusiastic participation in the introduction of tactics and weaponry new to the Australian Army I find it particularly gratifying that an officer of the Infantry Centre should be resurrecting this long-standing weakness in our preparation for war.

Department of Defence M. A. Count (Central Office) Lieutenant Colonel Canberra, ACT.

AT RISK


I must suggest, though, that many of these would not be practicable in the event of a major conflict. In such a conflict, the enemy would have considerable air support, if not overwhelming air superiority.

Given this hostile air situation, I think it is unlikely that any major units of the Fleet would be put at risk in the waters around the enemy invasion beaches. To do so would invite their loss, notwithstanding the considerable air defence capability of some ships. (I do not know the weaponry planned for the LSH).

D. J. Reid
Directorate of Artillery, Canberra, A.C.T.

DEFENCE FORCE JOURNAL


I support the last paragraph of Mr Killen's contribution regarding the stimulation of professional discussions on military and defence matters.

Mr Killen, himself not an unhumorous man, would no doubt support the continued inclusion of humorous pieces such as "A Medal for Horatius". I hope that we can see more light-hearted articles in future issues.

K. T. Graham
Swan Barracks, Perth, W.A. Major

Thank you for sending me a copy of the number one issue of the new Defence Force Journal. In my opinion it is a most desirable publication and will meet a very definite need. The services wanted such a journal.

Stuart M. McDonald
Brighton, Victoria Major General

I, for one, am pleased to see the passing of the Army Journal and the birth of the Defence Force Journal. The reason will be obvious shortly. The appearance of the new Journal is of a high order and promises much for the future. I would like to offer my congratulations to you and to all who have been associated with the Journal's inception and production.

One final look back at the Army Journal. In your editorial of June 1976 you made a plea for reader feedback, indicating that there was so little unsolicited comment that you were uncertain as to your reception by the military community. My opinion, based on a broad level of contact with officers from the middle and junior ranks, is that the Army Journal was not highly regarded as a truly professional publication for one reason — it was not sufficiently critical. Rightly or wrongly, the Army Journal was commonly believed to suffer from a censorship imposed at a high level which largely excluded opinion contrary to stated policy, resulting in a publication lacking in critical, imaginative and controversial matter. This was, in my opinion, the principal reason for the apathetic response to the Army
If the Defence Force Journal is to take its rightful place as a key medium of debate on defence matters, this stigma of censorship must be avoided. In his introduction to the first issue the Minister for Defence gives a positive lead; let us not crush the opportunity now at hand.

Your first editorial in the Defence Force Journal indicates that there will be a "less restricted policy towards article content". As I understand it, the Board of Management is now the final arbiter of Journal content. I would like to see you clear up once and for all the matter of censorship, by stating unequivocally who controls content and on what basis.

I am also concerned with three quantitative matters:

- A recent note in Routine Orders in the 2nd Military District (NSW) indicated that distribution would no longer be on an individual basis but on a varying scale of issue, eg. Lt Col/Maj 1:2, Capt/2Lt 1:3 and Nco 1:5.
- The first issue is dated November/December. Does this mean that only six issues will be published annually?*
- I understand that the Defence Force Journal, as with the Army Journal, is to be restricted to 64 pages.

All of these restrictions would appear to be financially based. If so, they are indeed false economy. This publication should have sufficient priority to allow the provision to all interested individuals (which I would hope includes the whole officer corps) of a personal copy. Alternatives might include the lodging of an application by all individuals wanting to receive a copy or, if necessary, a system of paid subscription.

Your comments on the number of articles awaiting publication are inconsistent with the other two quantitative restrictions I have highlighted. I hope that you will press for more frequent publication and more room in which to publish. Anyone in any doubt about the importance of this publication should read again Gavin Long’s opinion as expressed in ‘To Bengazi’, page 11.

One final suggestion related again to your June 1976 Army Journal editorial. If you really want to know what we think of your publication, all you need to do is include a small tear-out reader attitude survey in your next issue. You will soon find out how many people read the Journal and any other statistic you might find valuable. It might be illuminating!

Regular Officer
A. R. Black
Development Committee, Lieutenant Colonel Reid, ACT.

*See my comments on page 3.—Editor

NEIGHBOURLY AID

In my official speech at the opening ceremony of the Second Asian Congress of Paediatrics held in Jakarta in August 1976 in the presence of the President of the Republic of Indonesia, General Suharto, I said inter alia:

“... For technologically developed countries, and here I speak as a resident of Australia, the nation’s surest defence is to make its people and its resources as useful as possible to those more populous countries around. Mutatis mutandis, this is true for the defence of every country. In the case of Australia this means being as co-operative as possible in supplying food, in providing engineering skills, in assisting with surveying and in making provision for technical training.”

Comments in your Journal by Defence Force experts would be of great interest.

Thomas Stapleton,
Past President,
Australian Institute of International Affairs, Camperdown, NSW

MONTHLY AWARD

The Board of Management has awarded the prize of $30 for the best original article in the January/February issue of the Defence Force Journal to Major L. N. Hall for his article Prisoner of War Conduct After Capture.
THE AUSTRALIAN-AMERICAN ALLIANCE:

Some Possible Restrictions on a US Response

Captain M. G. Smith
Royal Australian Infantry

Introduction

ALLIANCES are never perfect: they are never unchangeable. Because they cannot be unconditionally guaranteed, under all circumstances, there can, therefore, be no such concept as the model alliance. Alliances, as with relationships, depend on the interests of the protagonists involved. International alliances, by virtue of the multiplicity of factors affecting the individual members and the collective body are, by nature, even less stable. As Edmund Burke once put it: 

"Men are not tied to one another by papers and seals. They are led to associate by resemblances, by conformities, by sympathies. It is with nations as with individuals. Nothing is so strong a tie of amity between nation and nation as correspondence in laws, customs, manners and habits of life. They have more than the force of Treaties in themselves. They are obligations written in the heart. They approximate men to men without their knowledge and sometimes against their intentions. The secret, unseen, but irrefragable bond of habitual intercourse holds them together even when their perverse and litigious nature sets them to equivocate, scuffle, and fight about the terms of their written obligations".

In terms of Australian strategic security the Australian-American alliance is not watertight. It claims no guarantees and no binding obligations. Its emphasis is on consultation and mutual consent. The assistance to be offered in the event of armed aggression is not stated equivocally but in the form of a declaration of intent. To the pessimistic Australian strategist then, the alliance represents nothing more in reality than a moth-torn security blanket — it is as useful to Australia today as was Singapore, the Empire, and the Royal Navy before December 1941. On the other hand by accepting Burke’s dictum we can see some sense in the existence of such an alliance. If alliances can never hope to be unconditionally guaranteed then the stated or unstated terms of a commitment on paper are not really worth much. What is important is the degree of common interest and mutual understanding that each of the allies possess. To the optimistic Australian strategist then, the alliance represents a symbiotic attempt to meet and solve common defence problems. This commonality is seen to be underpinned by the social, economic and political similarities which historically are thought to have linked the countries.

This article attempts briefly to examine some of the more obvious restrictions which might be placed on the US response to an Australian security threat. Such restrictions, naturally, are viewed from an Australian perspective. It should also be noted that this article makes no attempt to define and assess 'threat estimates'. Similarly, where scenario-settings are used they are intended merely to illustrate a particular principle which might cause the type of restriction on US responses referred to.

The Alliance — An Asymmetrical Reality

Firstly, it is essential to see the alliance in correct perspective. The alliance is not even: it is not symmetrical. The relative size and economic importance of the two countries preclude them from claiming equal status. The US is a super-power. Australia, though aligned to her (and perhaps sheltered by her), is not. At best Australia is a low-ranking middle power who would find difficulty in claiming union with the Third World. American influence in prescribing global strategy is undisputed. Australia’s, if it exists, is not considered. In terms of regional security Australia relies heavily on US policy and presence. In
terms of America’s regional security Australian policy is of little consequence. Economically, Australia is directly of minor importance to the US though is perhaps more important in the triangular relationship between the two countries and Japan. On the other hand, the US is economically of vital significance to Australia. Socially, Australia is very largely influenced by the American mass media and thus Australians believe they can relate to and identify with the Americans. The same cannot be said of Australian identification in the US. Fran S. Hopkins has correctly pointed out “that most Americans have never met an Australian” and Robin Boyd has rightly assessed that “communication is virtually one way along the Pacific axis”.

This asymmetry does not mean that the alliance is necessarily impotent and/or meaningless. There are those who claim that such a relationship is nothing more than the offspring of an ‘unequal partnership’ — that in Realpolitik it could be no other way, and that it does not prevent the alliance from functioning effectively. Others, more cynical perhaps, see this asymmetry as an in-built restriction on American response to assist Australian interests. They would not necessarily call for the alliance to be abandoned but for a re-appraisal of its effectiveness. In either case the alliance is still asymmetrical in nature, and being such, diverging viewpoints must at times exist between the member countries.

The crux of this argument is simply this: that if both countries view the alliance differently or if its importance is not equally understood, then so too might the need for response by both parties be judged differently. On the one extreme we might consider the situation where an ill-informed and apathetic American public might prevent American intervention on Australia’s behalf. Such cases where this situation might arise are difficult to imagine. They could range from the occupation and annexation by an over-populated and resource-hungry Asian power of some more remote parts of Australian territory (including islands) to American tacit support for a policy of opening-up White Australia in order to pacify both the demands of some Asian (or Third World) countries and of their own multinational pressure groups.

On the other extreme it is conceivable that although the Americans may be fully aware of the existence of a threat toward Australia they may simply not view that threat through the same glasses. For instance, the resettlement of Indians, Chinese or Indonesians in parts of northern Australia might not be seen by America as representing a threat to Australian national sovereignty, but in terms of avoiding a greater and more realistic threat, viz, the problems of over population and resource allocation. Such a policy would be even more credible if the US had already announced her intention to do likewise.

In a world of ever-diminishing resources it is also possible that the American desire for ‘dolly-lolly’ might persuade them to acquiesce in the event of an industrialised and re-armed Japan occupying and further developing large areas of Australian mineral deposits.

Such scenarios may be (and hopefully are) totally unrealistic. Even if true one would hope that Australia had sufficient lead time and sufficient perception to alter its strategy accordingly. Nevertheless, there is more than a kernel of truth in the fact that the existing asymmetry between Australia and America causes different and sometimes diverging viewpoints to emerge. It is very much as Frank Hopkins experienced from listening to Australian and American addresses at several Coral Sea celebrations in the early sixties. “The Australian talk of dependence,” he said, “baffled the Americans who failed to realise the depth of Australian insecurity, and the American talk of partnership puzzled the Australians, who never seemed to realise what a high estimate our (American) Armed Forces placed on their military capabilities.”

American Strategic Considerations

Australian politicians have long sought American oral reassurance that the alliance would be honoured under all possible threat conditions. Such reassurance however, like the ANZUS Treaty itself, can never be binding. On the one hand Australians hear the heartening words of John Foster Dulles and Averall Harriman and see the strong sentimental ties between leaders like Harold Holt and Lyndon Johnson. On the other, we read with some concern the words of pragmatists like Mc George Bundy when he explains the raw extent
of American involvement overseas: "The American commitment anywhere is only as deep as the continued conviction of Americans that their own interest requires it". 

In this simple statement of national self-interest probably rests more truth than in all the spoken rhetoric and public euphoria which has somewhat plastically come to pervade over the alliance since the Second World War. Nations cannot afford the luxury of permanent friends; nor, as history has revealed, permanent enemies. Nations have at best only transient foreign interests — transient in the sense that while their policy for national survival remains constant their changing relationship with other states is the variable factor. 

If this fact is undisputedly accepted then it follows that American global strategic policy is not static. In this sense Australia’s relationship with the US must be ever fluid. Moreover, because of the asymmetry of the relationship Australia may well (and undoubtedly will) have little influence in choosing the direction in which American policy is to flow. Accordingly, American response to an Australian call for assistance must be weighed against America’s other global interests. 

For instance, America has long pursued a policy of providing great assistance to Indonesia. So too has Australia, though for somewhat different reasons. If one was to crystal ball gaze, it would not be difficult to imagine a situation where the Indonesian archipelago was of greater strategic importance to the US than was Australia. If under these conditions Indonesia was to claim parts of Papua New Guinea and/or parts of Australian territory or if Indonesia was to threaten Australia and/or Papua New Guinea in some way, would the US still be prepared to respond to Australia’s plea for assistance?

Similarly, if America decided that Indonesia and/or Japan should be re-armed and re-directed to represent American interests in Asia, then how important a part would the Australian-American alliance play in deciding American foreign policy?

But in terms of American strategic policy there are some even more obvious restrictions that might be placed upon a quick US response to assist Australia. Firstly, despite the great advance in nuclear weaponry, we cannot be at all certain that the next world war would not be fought conventionally. If this does occur then America, like Britain in 1941, might find it impossible to provide adequate forces to meet contingencies on multiple fronts. This being the case, Australian territory could conceivably be given an extremely low priority. In a world conflict NATO would almost undoubtedly be given priority over ANZUS and SEATO. In this case, although the alliance might still stand in principle, America might have to confess to being unable to provide the necessary defence assistance required. Even if America was not committed elsewhere there can never be any real guarantee that US logistic support to Australia would arrive in sufficient time and quality to be of use or that the supply routes themselves would not be interdicted.

Secondly, in the event of Australia being threatened, America might well place more emphasis than Australia hitherto has on the ‘self-help’ aspect of Article II of the ANZUS Treaty. In such a case America might agree to render only that assistance which was to be matched by an Australian effort. This could mean that because of insufficient allied forces a military stalemate would result. In the political bargaining that might be expected to follow, Australia — possibly at the behest of the US — could well have to make certain concessions to the aggressor, some of which could possibly involve territorial rights.

Thirdly, in what might be considered a somewhat simplistic overview, there are other factors to consider. For example, America might, for reasons of detente (the balance of power, or whatever), consider that to involve herself with the problems of Australian defence is simply not worth the effort or the risk. Even the American facilities at Pine Gap and North West Cape might be considered too unimportant to warrant defending. Additionally, America might consider that inept Australian policy was the real cause of conflict in the area and may not be so readily prepared to bail Australia out from what might be seen as her just deserts.

Finally, some consideration must be given as to whether or not the American nuclear umbrella is included as part of the alliance; and if it is, then how much control Australia may have over its use. There are undoubtedly both advantages and disadvantages ensuing from any ‘nuclear connection’. Advantages in the sense that it may provide a deterrence
against would-be aggressors, and disadvantages because it might target Australia to the activities of America's enemies. But assuming that the alliance does include the nuclear umbrella then it could occur that, under rapidly deteriorating threat conditions, Australia might consider nuclear action as its only remaining hope for survival. An American decision to use nuclear force under these conditions would have to take stock of the global situation. If it was considered that such action would provide the catalyst for nuclear retaliation or establish a dangerous precedent for future hostile nuclear reaction it is doubtful that Australia's wishes would be supported by the US.

Therefore, when considering international relationships — especially uneven alliances like the Australian-American — the strategic options open to the partners must be considered. In democratic nations, more than elsewhere, the ultimate acceptance or rejection of these strategic options largely rests upon the attitude and psyche of the constituents.

American Domestic Considerations

Whether or not the American public knows or even cares about Australia is a vexing question. Whether or not they particularly care or want to care about world events is also open to debate. In a sense American foreign policy can be seen as the compromise between two contrasting sets of factors. On the one hand Australians view the deeply patriotic, keenly individualistic and free enterprise forces which have shaped America. These are the Natty Bumpo type myths which portray the American as a hard working, honest and independent soul even more bent on further extending and improving the frontiers of his nation. Linked with this betterment is the prevailing attitude of isolationism — of an America totally independent from outside strife: a nation able to deter all aggressors but not wishing to become involved with the problems of others. In the formulation of foreign policy these forces are inherent in the Monroe Doctrine and more recently the Guam Doctrine. To some extent American public opinion is still very much as George Washington prescribed:

"The destiny of Europe and Asia has not been committed, under God, to the keeping of the United States; and only conceit, dreams of grandeur, vain imaginings, lust for power or a desire to escape from our domestic perils and obligations could possibly make us suppose that Providence has appointed us his chosen people for the pacification of the earth". 22

On the other hand America is a real super-power in a real world, unable to stay aloof from the demands of global strategy even if only for the sake of her own national security.

The extent to which America will want to become involved in future outside adventures may largely depend on the changing balance between these contradictions. America would no doubt prefer not to play the role of international policeman and watcher, but her super-power status prevents her from doing so. It is because of these contradictions that one might argue that although the Vietnam war was fought in the jungles of Indochina, it was lost on the American streets and campuses. Similarly, any prolonged American military assistance required to help defend Australia, or protect Australian interests, might for the same reasons either quickly peter out or be not thought worth the initial effort. Much would seem to depend, therefore, on the education of and sympathy from the American public in relation to Australian sovereignty. 23

In much the same way the history books now reflect the fact that although America's commitment in the Second World War was very much a 'Europe First' policy, this was only made possible because of the Japanese attack on Pearl Harbor. Thus, while the American people could justify their entry into a war against Japan, their main efforts were directed against Nazi Germany.

Another possible restriction upon US response, related to American domestic matters, is the traditional counter-stance adopted by the President and Congress. It may therefore occur that even though the White House may wish to assist Australia its hands are tied by Congress, or similarly, that an initial American commitment to Australia is not as great as it might have been, or, is later withdrawn at a time when Australia is very reliant upon it. As an illustration of this principle one might judge the reason for the recent success of the Soviet and Cuban-backed MPLA in Angola largely as a result of Congress reluctance to grant increased aid to FNLA and UNITA. Although that parti-
cular situation would probably never resemble an imagined Australian threat, the principle of Congress-Presidential bi-polarity in foreign affairs is, nevertheless, a reality.

One further aspect of American decision-making should also be considered: that is the very limited ability of any outside nation in influencing the American policy-makers. As Alastair Buchan has pointed out, American allies possess only limited capability to shape US policy after the initial policy-making process has begun. In terms of US support for Australia this could mean that the final American decision might largely rest on how favourable (or unfavourable) an impression Australia had registered at the lower and more informal levels of policy formulation.

There are those who suggest that the real binding force of the Australia-American alliance is the large degree of economic co-operation and mutual dependence between the countries. While this dependence is certainly true for Australia it does not necessarily apply for America. Not only do American imports from, and exports to, Australia total only a small amount of all American foreign trade, but so too does American investment in Australia rank as only the fourth largest concentration of US investment abroad. From an economic standpoint then, Australia is much more dependent on the US than is the reverse. This means, of course, that within the alliance the options of US assistance to Australia weigh very favourably on the side of America. From an economic viewpoint there is no question that, assuming the current trade trends continue, America would have little difficulty surviving if Australia was to go under: and America might even prosper if Australia was to go under to an industrialised and productive country which itself had good relations with the US.

Another economic consideration to be taken into account is the continued ability of America to maintain its influential position of big business and the unforeseen decline of nations’ importance are impossible to predict. Yet it does happen. In less than a century Britain, once the world’s greatest nation, has been reduced to the ranks of a middle power. Similarly, the rise of the USSR and the PRC to super-power status was once not seriously contemplated. For Australia then, if America was to wither so, too, would the effectiveness of the alliance, and so too, would America’s capability to respond to Australia’s needs.

Conclusions

The foundation stone of the Australian-American alliance was the ANZUS Treaty signed in September 1951. It was an alliance largely born as an American concession for Australia’s reluctant agreement to the Japanese Peace Treaty. Later, SEATO did to some extent increase the depth of the alliance but added no substance to any bi-lateral defence commitment between Australia and America. The alliance continues to rest on the goodwill and mutual consent of both parties. The alliance is neither binding on either party nor does it provide a guaranteed security cover for Australia. For the most part Australian-American co-operation has been harmonious, with Australia still able to voice dissenting opinion over issues as varied as Suez, Laos and Indonesia. But as with all alliances there exists a number of restrictions that must be placed on the ability of member countries to always respond to the wishes of the other parties. In matters of national security these restrictions are continually in a state of flux, depending on the current self-interest of the member states. This fact might suggest that it is folly to base national defence policy primarily on the basis of an alliance system. Alliances may be useful to combat common enemies (both militarily and politically), but they provide no guaranteed answer against localised threats or threats which, for one reason or another, are considered by one party to be outside the domain of the alliance. On the other hand, greater self-reliance might not only add strength to existing alliances but might provide the ‘big stick’ necessary for those threats not covered by alliances.

Undoubtedly there are a number of other restrictions to a US response which have not been discussed here. An immediate example that comes to mind is the extent to which the US could (or could not) inflict economic and/or diplomatic pressure upon certain countries on Australia’s behalf. These restrictions together with those already raised, are left to the politicians and strategists (and eventually to the Australian people) so they may decide the extent of Australian national security which
is presently to be gained from the Australian-American alliance.

NOTES


2 ANZUS PACT — Article IV

3 An examination of Australia’s false strategic dependence on the Singapore base and British sea power in the inter-war years can be found in John MacCarthy Australia and Imperial Defence 1918-39: A Study in Air and Sea Power, Melbourne, 1976; especially Chapters 3 and 6.

4 There are numerous historical examples of paper alliances being proved meaningless. In the extreme, one example might be the Soviet-Nazi Non Aggression Pact.

5 Arguments for and against historical similarities between Australia and America have been stated elsewhere. It might simply be said here that although there is some commonality between each country’s history there are also deep and marked differences.

6 This term is currently one of the most over used cliches around. Its meaning appears to be so wide as to include everything from nuclear holocaust to pollution.

7 This word is used in the dual sense: to describe something that is not symmetrical, and to evoke the Australian desire for the relationship to be symmetrical.

8 In 1974 Australia provided nearly half of Japan’s iron and aluminium imports, one third of its coking coal, and four fifths of its wool imports. The importance of the Australia-Japan relationship is therefore of interest to the USA.


10 Ibid p. 145.

11 The list is neither intended to be complete, nor definitive.

12 Frank S. Hopkins op. cit. p. 236.

13 See T. B. Millar Australia’s Defence, Carlton, 2nd ed. 1969, p. 48. There are undoubtedly more recent examples.


15 America’s refusal to assist with the defence of Singapore, and position a naval fleet there — despite several requests from Australia and Britain during 1940-41 — might be considered as an example of this. See R. A. Esthus From Ennui to Alliance: US-Australian Relations 1931-41, Seattle, 1964, chapter 8.

16 The number of threats are too numerous to imagine, ranging from the siting of missiles against Australia/PNG to the question of coastal water territory and poaching by fishing vessels. One might also consider the possibility of a country embarking on a ‘foreign adventure’, against a supposed threat in order to unify dissenting domestic parties/opinion and thus prevent internal chaos. Some commentators, for example, have considered this reason to be the main cause of the 1965 India-Pakistan conflict.

17 On page 22 of the US hearings on ‘The Posture of Military Airlift’ before the Research and Development Subcommittee of the House of Representatives Committee on Armed Services, November 11th, 1975, it was stated that the total US military airlift capacity (including the Civil Air Reserve Fleet) was 34.12 million ton miles per day. Therefore, by deduction, the maximum that Australia might expect, on a twenty-four hour shuttle, would be about seven thousand tonnes per day. A more realistic figure however, might be one thousand tonnes. Also of interest, is that the US currently has a fleet of seventy C5A aircraft capable of transporting most heavy battlefield equipment. However, equipment coming by sea, would probably not arrive for at least three weeks from the time of the decision to make it available.

18 Article II states: “ . . . the Parties separately and jointly by means of continuous and effective self-help and mutual aid will maintain and develop their individual and collective capacity to resist armed attack”.

19 We should not entirely discount the possibility of America diplomatically bargaining with another power at a very high level and without first consulting Australia. The Anglo-Japanese alliance of 1902 — which committed the British Empire — was signed in this way (despite Australian racial prejudice at the time) simply because Australian interests were either not considered or thought to be of only minor importance by Britain.

20 An historical example of inept Australian policy might be Australia’s ‘Trade Diversion’ policy of 1936-37. This policy primarily discriminated against the US and Japan and favoured the Commonwealth countries. Most Australian economists at the time agreed that the policy was economically suicidal but there was only minor opposition amongst political parties. Japan and America naturally reacted against the policy and the Australian economy suffered adversely. Further accounts can be found in H. Burton “The ‘Trade Diversion’ Episode”, Australian Outlook, April 1968 and R. A. Esthus, op. cit., chapters 2 and 4.

21 The fictional character of the James Fenimore Cooper series on early American history: The Pathfinder, The Last of the Mohicans, etc.

22 Quoted in H. G. Gelber “The USA and Australia” op. cit., p. 80.

23 One of Roosevelt’s reasons for not agreeing to British and Australian requests for a US presence at Singapore in 1940 was the forthcoming Presidential election to be held in November of that year. It was felt that such a policy would alienate the large number of ‘isolationists’ in the country. See R. A. Esthus, op. cit., chapter 8.


25 See H. G. Gelber “The USA and Australia” op. cit., p. 87.

26 Total Aust. Exports to USA in Sm 1970-71 71-72 72-73 73-74 74-75
519 615 759 750 832

27 Total Aust. Imports from USA in Sm 1970-71 71-72 72-73 73-74 74-75
519 615 759 750 832

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Director of Medical Services — Army

Introduction: The Problems of Public Health in the Army

"In 1943, for every man wounded, I was losing 120 from sickness. My daily evacuation rate was 13 per 1,000. A simple calculation showed me that the whole of my (Fourteenth) Army would melt away in three or four months."

This extract from a speech by Field Marshal Sir William Slim to the Royal Australasian College of Physicians in 1957 very clearly shows the folly of thinking that the only medical requirement in war is to provide surgical services for the men wounded in combat. But this notion, that the medical services in war are required only to provide treatment for the wounded, dies hard and too often lessons of the past are forgotten. So that with each new campaign tragedies of great suffering, illness and death still occur because the principles of public health are not appreciated. Slim goes on to acknowledge this in his speech — “This gloomy picture... was changed by early 1945 into that of the healthiest Army Britain has ever had overseas. Our sickness rate of evacuation was 1 per 1,000 per day. The transformation was only possible, the existence let alone the victory of my Army was only possible, because of the skill, courage, ingenuity, energy and devotion of my doctors. I yield to none in my admiration for our surgeons... theirs was the more spectacular role, but the men who saved and restored my Army were the physicians. It was their research which discovered new means of grappling with causes of disease... it was their advice which enabled my officers to order preventative measures that reduced startlingly the incidence of sickness.”

These extracts also clearly illustrate the two main aspects of the problems of Public Health in the Army, the first being the appreciation of the necessity of public health facilities and measures in any community, and the second aspect being the means, and knowledge, to solve specific problems encountered in a particular campaign relating to time, place and nature of the conflict. In the succeeding chapters it is intended to show that the former problem has usually been the most difficult to solve whilst solution to specific public health problems are far less difficult. It is strange that this should be so, for at the conclusion of both the Crimean War and the Boer War Royal Commissions reported and stressed the need for sound public health measures and employment of “a Medical Officer charged especially with the sanitary supervision of the Army” (Herbert 1860) yet in the early phases of World War I and World War II the importance of military hygiene was ignored. Lewis in the British Army Review of 1961 writes of this as “an attitude of laissez-faire towards hygiene insidiously developing.
between wars”. From this we see that these problems can further be examined in separate phases, the first concerning difficulties in time of peace and secondly, difficulties in time of war. This of course is a continuing problem for non-military powers such as the British Commonwealth countries, who “run down” their armies in time of peace and tend to retain only the “essential” elements of a service.

It is intended in this article to deal with these “facts of life” by firstly giving an historical account of the development of public health in the army, then dealing specifically with problems in time of peace and time of war in an attempt finally to show the continuing need for high standards in military public health as they apply to the present day.

**Historical Background**

References to hygienic sanitary practices can be found in many early writings as in Deuteronomy Chapter 23, Moses gives perhaps the first description of a shallow trench latrine to his army: “Thou shalt have a place also without the camp, wither thou shalt go forth abroad. And thou shalt have a paddle upon thy weapon and it shall be when thou shalt ease thyself abroad, thou shalt dig therewith and shalt turn back and cover that which cometh from thee”. Homer in his writings describes an outbreak of plague among the Greeks at the siege of Troy some three thousand years ago and of how Agamemnon, believing this was due to the filthy state of the camp, stopped the epidemic by having the camp cleaned and all refuse thrown into the sea. But this was in the age when Man although believing “cleanliness was next to Godliness” was motivated to carry out certain hygienic practices, not through knowledge of disease but rather through the belief that uncleanliness and disease were due to the spirits of evil and must be avoided.

Similarly it was appreciated that a fit healthy army was necessary for victory. Moses understood that for success an army required good health and high morale, and laid down clear rules for selection of troops for his army. In chapter 20 of Deuteronomy he declared the “fearful and fainthearted let him go and return unto his house, lest his brethren’s heart faint as well as his heart” and in chapter 23 decreed that the unclean “shall not come within the camp”.

Although appreciating many of the problems of health, the early military leaders were frustrated by lack of knowledge of cause of disease and it was not until the renaissance of learning (1450-1750) that understanding of disease, and from that, prevention methods became possible. Such great works as Vesalius’ “Fabrica” (1543) Jean Fernel’s “Medicina” (1542) and Fracastoro’s “De Contagione” (1546) threw light on the working of the human body and provided evidence for the specificity of disease and the nature of infection, and later in 1616 William Harvey, in accurately describing the circulatory system provided answers for the spread of infection through the body. At the same time social reformers appeared to stir public conscience into the injustices meted out to the poor, the sick and the crippled. Sir Thomas More wrote “Utopia” in 1516 in which he outlined the need to care for the less privileged people in society. By the work of these great men and others such as John Gaunt on “Bills of Mortality” (1662), Ramazzini on industrial diseases (1690) and Richard Mead on “Plague” (1720) the stage was set for a new age, an age of reasoning and later understanding.

From the great discoveries in science, from the compassion of man to his less fortunate neighbours, from the stark exploitation of workers in the industrial revolution in England and Europe, slowly was born the frail but viable discipline of public health. But this enlightenment was slow to reach the army and even the lucid and factual writings of Sir John Pringle when Physician General to the Forces (1742-8), published as “Observations on the Diseases of the Army”, were ignored by Army Commanders and Army medical officers alike. In this publication Pringle wrote on commonsense measures of hygiene, prevention of disease, and even described the means of the spread of plague by lice, which was to cause havoc in the British Army 100 years later in the Crimea. Despite the enlightenment in matters of health shown by Pringle and also by James Lind in his “Essay on the Most Effectual Means of Preserving the Health of Seamen” (1757) where the dangers of poor ventilation, damp, filth, poor food, poor clothing and excessive fatigue were stressed as
major contributory factors in undermining the health of armies or ships' crews, the policy of laissez-faire continued until after the Crimean War. Perhaps the main cause of this attitude was that the British soldier was considered as expendable cannon-fodder that didn't deserve humanitarian consideration. Cecil Woodham Smith in her book “Florence Nightingale” writes: “The private soldier of 1854 did not bear a good character. The young man who was the disgrace of his village, the black sheep of his family, enlisted. The Duke of Wellington described his army, the army which won the victories of the Peninsular and Waterloo, as ‘the scum of the earth enlisted for drink’. The soldier was a dangerous brute to be kept in subjection only by flogging, punishment, drill and iron discipline”. Dr Brush of the Scot’s Greys wrote to the Hospitals Commission of 1857: “No general officer has visited my hospital in Crimea nor, to my knowledge, in any way interested himself about the sick,” and went on further to point out the folly of this lack of interest in saying, “Unless those in Command do take an interest in their sick soldiers... until they do lend a helping hand to their medical officers it will not be possible for the duties of the medical department to be efficiently carried on”, which implies that the army could not be maintained at efficient fighting strength and condition in such circumstances.

It was with this background and philosophy in matters of health and administration that the British army sailed for Crimea in 1854. The army, triumphant at Waterloo 40 years earlier, had been allowed to run down in strength, so that administrative and medical resources were quite inadequate for the mobilization programme. So chaotic was the situation that Cecil Woodham Smith writes: “Before the Army sailed the processes by which the troops were to receive food and clothing, to be maintained in health and cared for when wounded or sick, had already fallen into confusion”. In the campaign appalling errors in medical matters were made so that in the first six weeks due to poor siting of the British camp and inadequate sanitary control, an epidemic of cholera broke out, rapidly taking 2000 victims. This quickly overwhelmed the medical facilities of the force so that when the Battle of the Alma was won in September 1854, “there were no bandages, no splints, no chloroform, no morphia, the wounded lay on the ground or on straw mixed with manure in a farmyard”. Despite heroic efforts of the medical staff, the inspired work of Florence Nightingale and her gallant nurses, despite the goodwill of the British people at home, the final statistics of this fearful campaign were that 73% of the original force of 30,000 died from diseases in the first six months. This figure did not include the number who died from battle injuries.

The public scandal of Crimea quickly brought public reaction, and as a result of the Royal Commission in 1857, public health ideals were incorporated into army regulations. The Commission recommended two fundamental rules for the maintenance of health in the army which were adopted and apply to this day. The first was that the health of an army or unit of an army is the responsibility of the officer in command, and secondly that medical officers and health officers be appointed and be “given power to advise commanding officers on all matters pertaining to the health of the troops, including the siting of camps, diet, clothing, drill, duties on exercises”. Thus the disaster of Crimea produced dramatic changes in the army, the firm establishment of public health as a necessary part of an army and with this a consciousness of the needs and equality of all men. Cecil Woodham Smith sums this up by writing, “Never again was the British soldier to be ranked as a drunken brute, the scum of the earth. He was now a symbol of courage, loyalty and endurance, not a disgrace but a source of pride.”

The Army in Peace

The British way of life, dating back for centuries, has been that of a peace-loving people, slow to anger and placing their faith in freedom of all peoples to choose their form of employment, their way of leisure, and their religious and political views. This attitude of “fair play” and respect for the rights of man abhors war and aggression so that in times of peace the military services are seen as unnecessary and expensive tools of evil. This concept has been carried by the British people to all parts of the world and has continued as the guiding philosophy of both Commonwealth countries like Canada, Australia and New
Zealand, and British inspired republics like India, United States of America and Ireland.

That this philosophy is correct few would doubt, but it has meant that in all campaigns where Britain and her allies have been induced to enter, they have entered with an untrained and poorly equipped force. In more recent campaigns such as Crimea, Boer War, World War I, World War II, Korea, and in the case of Australia, Vietnam, battle has been joined with unfavourable conditions on our side and invariably stinging defeats or disastrous sickness rates have occupied the first phase of the war. The causes of these failures are many, but not the least being failure to appreciate both the broad and the specific aspects of public health. Examples of such disasters are given in Table 1.

Rates of Illness due to (a) Dysentery and (b) Malaria in Campaigns involving British, American or Australian troops

<table>
<thead>
<tr>
<th>Battle</th>
<th>Date or Period</th>
<th>Strength of Force</th>
<th>No of Cases</th>
<th>Approximate Rate per 1000 per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Dysentery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peninsular Wars (Br)</td>
<td>1809-1815</td>
<td>—</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>Boer War (Br)</td>
<td>1899-1902</td>
<td>200,000</td>
<td>96,000</td>
<td>160</td>
</tr>
<tr>
<td>Gallipoli (Br &amp; ANZ)</td>
<td>Apr 1915 to Jun 1916</td>
<td>116,000</td>
<td>30,000</td>
<td>350</td>
</tr>
<tr>
<td>Macedonian Force (Br)</td>
<td>1918</td>
<td>128,000</td>
<td>24,000</td>
<td>195</td>
</tr>
<tr>
<td>Vietnam (US)</td>
<td>1969</td>
<td>300,000</td>
<td>12,000</td>
<td>40</td>
</tr>
<tr>
<td>(b) Malaria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walcheren Expedition</td>
<td>1 Aug-10 Oct</td>
<td>70,000 (died)</td>
<td>10,000</td>
<td>2570</td>
</tr>
<tr>
<td>East Africa</td>
<td>6 months</td>
<td>58,000</td>
<td>51,000</td>
<td>1760</td>
</tr>
<tr>
<td>Milne Bay— Sep to Dec</td>
<td>Average</td>
<td>50 per week</td>
<td>2600</td>
<td></td>
</tr>
<tr>
<td>New Guinea</td>
<td>1942</td>
<td>1000 per week</td>
<td>560</td>
<td>320</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Sep to Dec 1968</td>
<td>7,000</td>
<td>560</td>
<td>320</td>
</tr>
</tbody>
</table>

Table 1

From Table 1 it will be noted that disasters of considerable magnitude have occurred even up to the present day. The common factor in each case was that a force was committed to a campaign where either inadequate medical planning and preparation was made, or the health hazards were not fully appreciated, so that effective preventive measures were not taken.

Over and over again history has shown that in the years of peace the army medical services are run down to a skeleton staff, a staff capable only of running day-to-day medical requirements. With no facility to keep up to date, to study and build on lessons learnt in the past, our medical services have been overwhelmed when mobilisation occurs. An outstanding example of this policy of cutting the army to the bone was that when Australia declared war on 3 September 1939, and promised immediate aid to Britain, the regular medical officer strength of the Australian Army was 3! This included the Director General of the Medical Services and two others.

Despite the enlightenment in Army Public Health following the Crimean War when it was realised and published in a Royal Commission that an effective medical service must be maintained in peace, when an Army Medical School was established at Fort Pitt on 2 October 1860, when brilliant work was carried out by such great men as Professor Edmund Parkes, General Sir William Leishmann, Brigadier Boyd and others, still the British Army and her allies encountered huge losses from preventable disease in World War II. This is because it is very difficult to demonstrate the value of expenditure in public health when disease is under control. This difficulty is aptly put by M. M. Lewis (1958) when he wrote: “Just as the status of the subject of hygiene in the Army has tended to decline in times of peace, a similar spirit of laissez-faire is apt to affect insidiously the status of the civilian Public Health Services in time of security and prosperity. As such times, when there is nothing obviously detrimental to health upon which public opinion can be focused, the role of the Public Health Service in creating this state of affairs is slowly forgotten; moreover the fact that this state of affairs is maintained only by the constant vigilance of the Public Health Services is comprehended by only an enlightened minority”.

As with its civilian counterpart, public health in the army covers an enormous range of medical disciplines which are listed in Table 2. In time of peace the vastness of the field is made even broader due to two features unique
to a peacetime situation. The first is the specific duty of public health care to large military communities containing soldiers, their wives and families, whilst in the second place study on a global scale must be followed so that preparatory plans, possible hazards and new advances are available at short notice to cover a force mobilized for service in any part of the globe. In the latter case the task is so vast that paradoxically the “skeleton medical department” in peace really needs to be larger than is required when battle is joined and all factors of place, time, space and nature of operations are known.

**Army Public Health Fields of Endeavour in Time of Peace**

**a. Due to Requirements of a Peacetime Army**
1. Provision of public health services for army installations — water, food, waste disposal, health education, housing, immunization, etc.
2. Provision of public health services for families, e.g., school health service, child welfare, family planning service, housing, recreation facilities, home visiting, etc.
3. Training of staff in public health duties.
4. Provision of health services in training exercises.

**b. Due to planning for War**
1. Selection schedules for recruiting.
2. Immunization requirements for service in any part of the world.
3. Clothing, diet, shelter, and movement requirements for all climates and seasons in the world.
4. Regular updating on prevalent diseases, accident causes, and living conditions in all parts of the world.
5. Updating and research on preventive measures against disease, injury including occupational hazards, and hazards due to weapons of war, e.g., radiation, chemical and biological as well as conventional weapons.
6. Revision of training programmes on health.
7. Updating on the psychiatric problems in peace and war.
8. Educating the army as a whole to be vigilant in matters of health.

### Table 2

**The Army in War**

The aim of our army in war is to defeat the enemy and restore law and order to enable man to live in peace. As mentioned in the previous chapter, the English speaking peoples tend to maintain only a skeleton army in peace so that in times of war huge, rapid, mobilization must take place to build up a strong army.

**US Army Death Rates Per 1000 Per Year**

(from Preventative Medicine in World War II - US Army Vol III page 234)
For the aim to be achieved there must be sufficient men, materials and determination to carry out the task. Conversely should there not be sufficient men, or materials, or determination, then the aim cannot be fulfilled. These three factors are in fact essential elements for victory and thus must be available at the right time and the right place. To achieve these essentials the production and procurement of materials is the responsibility of government of the country and supply services of the army, but to secure men and determination the medical services play a key part.

To have men and determination implies fit healthy men with high morale, and it is within this field that a high standard of preventive and curative medicine is essential. When thinking of the medical services in war, the tendency very naturally is to think in terms of care of those wounded from hostile enemy action, for it could be argued that the men in the army are young men selected to a high physical and mental standard, and as such rarely get sick. However this has sadly been proved incorrect all through history. The figures graphically shown below give death rates by cause in the US Army during wars in the past 200 years, and show the fallacy of this thinking.

The graph (fig. 1) clearly shows that in the past deaths from battle injury were dramatically less than deaths from disease and non-battle injury. It shows that even with modern medical knowledge and facilities, in World War II deaths due to disease and non-battle injury were still alarmingly high.

The high incidence of illness, and therefore unusable manpower is still a major cause of hospitalization in modern war. Table 3 gives the 10 leading causes of hospitalization in US troops in Vietnam in 1966.

### Ten Leading causes for hospitalization in US Troops in Vietnam in 1966

<table>
<thead>
<tr>
<th>Condition</th>
<th>Rate/1000/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Injury due to Battle</td>
<td>83.6</td>
</tr>
<tr>
<td>2. Injury not due to battle</td>
<td>72.9</td>
</tr>
<tr>
<td>3. Pyrexia of Unknown Origin</td>
<td>57.2</td>
</tr>
<tr>
<td>4. Skin conditions</td>
<td>39.9</td>
</tr>
<tr>
<td>5. Diarrhoeal diseases</td>
<td>39.0</td>
</tr>
<tr>
<td>6. Acute respiratory diseases</td>
<td>32.7</td>
</tr>
<tr>
<td>7. Malaria</td>
<td>27.4</td>
</tr>
<tr>
<td>8. Neuropsychiatric conditions</td>
<td>14.5</td>
</tr>
<tr>
<td>9. Eye disorders</td>
<td>6.2</td>
</tr>
<tr>
<td>10. Ear infections</td>
<td>5.4</td>
</tr>
</tbody>
</table>

### Table 3

A simple calculation will show that the principle stated above, namely that battle injury only accounts for a fraction of the sickness rates in war. This can be shown by comparing rates due to battle compared with the rates of other causes of hospitalization as follows:

- Hospitalization due to Battle—83.6/1000/year
- Hospitalization due to other causes—295.2/1000/year

This gives a ratio of 1 battle casualty admitted to hospital for every 3.5 admitted for other causes.

What does all this mean? It means two things: firstly that greater emphasis must be given to preventive medicine in war than has ever previously been realized or accomplished, and secondly, the realization that to have sufficient numbers of fit men to ensure success in battle, a vast reduction in man-power wastage through non-battle injury and sickness is essential. Of course this has been written about so often, but it is readily forgotten. Cecil Woodham Smith writes of Florence Nightingale to whom:

> “It became clear . . . that she must look after the troops not only when they were ill, but when they were well. What she did for them outside the hospital was as important as what she did inside the hospital” (Crimea 1855).

Again after World War II the same conclusions are reached by a Consultant Physician to the Army (RAMC) who wrote:

> “It is my opinion that the Army Medical Service requires to be more pre-occupied with prevention than it is at present. This means that a much higher proportion of personnel should be allocated to whole-time hygiene duties. It always struck me as absurd that we had about 5% of our personnel engaged in prevention and most of the rest occupied in curing diseases which need not have occurred had known knowledge been fully applied . . . . one medical officer engaged in hygiene can save the work of 10 medical officers in hospitals . . . ” (Marriot, 1946).

It must be realized however that preventive medicine, a high standard of hygiene, and so
a low incidence of non-battle injury and sickness is not the sole responsibility of the medical services, it is the responsibility of every soldier of every rank constantly to practise and employ the principles of public health. Success in public health starts with a high standard of personnel hygiene, and as with civilian public health, teaching, supervision and provision of facilities for good hygiene are essential at all levels of command. Brigadier MacCallum of RAAMC writing about this point makes the fundamental point that "It is axiomatic that the ideal of thorough indoctrination of the individual soldier is the pivot of hygiene training", and the advantages and successes of this regime can well be demonstrated in the following table (4) concerning malaria rates in US troops in the Pacific Campaign of World War II. Rates per thousand troops per year are given and the numerical hygiene effort for each rate also shows clearly that the rate fell proportionally to the effort in control and prevention.

Malaria rates US Army World War II — Pacific Asiatic area, compared with number of units engaged in malaria control and survey

<table>
<thead>
<tr>
<th>Area</th>
<th>Year of Period</th>
<th>Malaria cases per 1,000/year</th>
<th>No. of Malaria units in area</th>
<th>No. of Malaria units surveyed in area</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW</td>
<td>1943</td>
<td>245</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Pacific</td>
<td>1944</td>
<td>75</td>
<td>28</td>
<td>21</td>
</tr>
<tr>
<td>South</td>
<td>1943</td>
<td>41</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>Pacific</td>
<td>1944</td>
<td>43</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Asiatic</td>
<td>1943</td>
<td>181</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Theatre</td>
<td>1944</td>
<td>174</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>(China, Burma, India)</td>
<td>1945</td>
<td>37</td>
<td>35</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 4

One special branch of public health that deserves mention in relation to casualties of war is that of psychiatric casualties. Enormous studies have been made in the past fifty years to overcome the human suffering as well as the huge manpower wastage caused by such casualties. In World War I a psychiatric casualty was quickly dubbed as suffering from "shell shock", and rapidly evacuated from the field as being a nuisance and to prevent his "contaminating" his fellow soldiers. It was considered humane quickly to get these casualties out of the battle and sent to the security of their families at home. Tragically, time has shown this to be quite wrong, for the individual so labelled tends to remain to himself, his family and his friends, a mental case requiring support all his life. During World War I, in the US Army 122,000 men were so labelled and hospitalized, and of this huge number no less than 34% were discharged as unfit for any form of service. Research and better understanding into the cause, diagnosis, and treatment of these cases has dramatically changed this situation. It was appreciated that the important aetiological factors causing psychiatric casualties were not only due to fear and fatigue of combat; but that the factors of being in a strange new environment, being physically tired, receiving irregular and inadequate food, being wet, cold, dirty and miserable, and being uncertain and uninformed of the likely outcome and duration of these conditions that are the really potent producers of neuroses. It was realized that the rate of such casualties could be dramatically reduced by preventive means. Such means being that of improved diet and clothing, appreciation of fatigue and improvements in amenities such as a good mail service, rest areas, and perhaps most of all good leadership and command by the officers. The term "shell shock" has been dropped and the following principles applied:

- Psychiatric screening at time of recruitment and in early training.
- Fitting the man to a job he can do.
- Treating psychiatric casualties as far forward (i.e. close to his place of employment) as possible.
- Aiming for high morale by steps to prevent boredom, loneliness, fatigue, sickness, and fear.
- Leadership training for all personnel in command.

It can be thus understood that like its civilian counterpart, public health in the army in war covers a very broad field. It requires knowledge and application in the vast aspects of communicable disease, occupational diseases, environmental illness and in each must be not only up to date but geared to meet any new
challenge that may be detrimental to the health of man.

**What has been achieved**

The wheels of progress turn slowly in a democratic society but nonetheless much has been achieved in the field of Public Health in the Army since the calamitous days of Crimea. Although the enthusiast may feel that the wheels of progress turn too slowly, experience and natural conservation of free people are undoubtedly a sound safeguard against injudicious reforms.

Following the disasters of Crimea many reforms inspired by Florence Nightingale and engineered mainly by Sidney Herbert were introduced into the Army. "Army Health officers were appointed and the practice of hygiene was acclaimed the primary duty of the military medical service" (Lewis 1958). In 1860 the Army Medical School at Fort Pitt, Chatham opened as recognition that army doctors and medical staff needed special training to enable them to advise on hygiene matters. At the opening address of this school, Deputy Inspector-General Longmore said of newly commissioned army doctors, "His studies have all tended towards the prime object of the great bulk of British practitioners — the cure of disease. But the cure of disease, though important ... is by no means his chief duty ... he best performs his functions, in the eyes of the State, who has the least to treat, who keeps his men in the most efficient state of health." (Longmore 1860) This school, later to move firstly to Netley in 1862, and then to Millbank in 1907 has continued to be an integral part of the British army and has provided high quality training for both army doctors and medical staff in such fields as military surgery, military medicine, pathology, army health and later psychiatry. Along with civilian recognition that public health staff require special training, the army has been to the forefront in arranging such special training for its medical staff. Public Health Inspectors, qualified by civilian examination have long been employed in army field units. Similarly, the speciality of army health was recognised for army doctors who received special army and civilian training including post-graduate diplomas in Public Health, Tropical Medicine and Industrial Health, and forms a department within the medical services, these two groups being specifically charged with the preventative aspects of diseases and maintenance of health for all ranks.

Within the scope of activities of army health, the RAMC has developed to meet the changing needs of the army since its inception after the Crimean War. But for a depressing regression in this field prior to the Boer war, resulting in gross failures in health prevention and control, and another Royal Commission in 1901, the achievements in the field of army health have been steady and fruitful.

So today in Britain and in many Commonwealth countries the army has established training centres for the teaching of army health to all ranks of the Medical Corps. Such places are the Military College at Millbank which is mainly concerned with research and further training for doctors, and the Army School of Health at Mitchett where both research and training of medical orderlies is carried out. Within those and other similar institutions students are taught the principles and practice of public health as applicable to army life. These include not only elements of environmental health, communicable disease and sanitation but also detail as to clothing, diet, survival in differing climates, housing, and such topics necessary for good health. Combined with this are continuing research programmes into methods of combating ill health in all parts of the world where troops may serve.

Equally important has been the efforts to ensure that non-medical personnel in the army are made aware of, and appreciate the need for health as a requisite of command. Although much effort has been expended in this the results are not always good, even though its importance has been stressed for many years. In 1779 US General George Washington appointed a Prussian army officer Frederick Von Steuben inspector of training and it is interesting to record part of the instructions laid down by Von Steuben for Captains. "A Captain cannot be too careful for the compans the state has committed to his charge. He must pay the greatest attention to the health of his men, their discipline, arms, accoutrements, ammunition, clothes and necessities ..." (Greaves 1970). In this context more
PUBLIC HEALTH IN THE ARMY

and more emphasis is being placed on health education and understanding man in the Training schools of the army. The war of 1939-45 did much to enlighten commanders and most senior officers today would agree with the words of US General Maxwell D. Taylor who said, “A reflective reading of history will show that no man ever rose to military greatness who could not convince his troops that he put them first, above all else.” (Greaves 1970) and of Field Marshal Montgomery who said, “There are no bad battalions, there are only bad officers.” These expressions reflect the changed attitudes of modern leaders and not only ensure that health standards today are high in the army but give a lead to soldiers of the future.

Current Problems and Changing Patterns of Public Health in the Army

“Much, today, that we see as abnormal in the physical, mental, and social field was in comparatively recent times regarded as normal. Mere absence of disease is no longer enough. Utopians must be positively healthy.” Brockington (1969). So it seems that as we uncover the secrets of one disease more problems are presented to us, and this is a true and very sobering fact in a rapidly changing world.

In the discipline of public health in the army the words of Professor Brockington well apply, for with new sophisticated means of travel, types of weapons, areas of operations, and the emphasis of speed many new problems are unfolding daily. To look at but a few of these emerging problems will provide evidence of this truth.

“The problem of malaria which in 1955 was estimated to have caused 2.5 million deaths, and 250 million cases, was taken up by the World Health Organisation as requiring paramount attention, and eradication programmes were started in many parts of the world.” Young (1966). But not only has the task proved enormous, new problems have appeared in the form of resistance developing in the mosquito against hitherto effective insecticides and larvicides, and in the form of resistance by the malarial parasite to suppressive drugs. To complicate these problems doubt is now being cast on the toxicity and consequent danger to man of many insecticides e.g. DDT, and suppressive drugs e.g. Dapsone (Strickland (1970)). For these, and many other reasons the problems of malaria control, prevention, and eradication have still to be solved.

Sadly the story of Yaws and Cholera, which over the centuries have caused untold deaths and suffering, and which in recent times appeared to be controllable still hold mysteries to man. The El Tor strain of Cholera, appearing in Indonesia in 1960, has relentlessly spread westwards for no apparent reason. The vaccines against this disease are good but not 100% effective. Why? The programme to eradicate Yaws in Africa appeared relatively simple, for one or two million units of Penicillin rapidly cured the condition. But now evidence is starting to appear that the character of Yaws is perhaps changing and Syphilis is taking its place in the African populations. “Venereal syphilis in fact been reported in some areas where Yaws had been previously endemic.” WHO (1970).

In tropical areas where Australian troops must be ready to serve, communicable diseases like leptospirosis, Infective Hepatitis, Dengue fevers, Amoebiasis, Schistosomiasis, Ankylostomiasis and Filariasis are among but a few for which the whole answers on prevention and cure are still wanting. Environmental problems of hot climates including heat illnesses, prickly heat, tropical ulcers and others require much more research before we can say they are completely under control.

Modern travel with high speed aircraft at supersonic speeds and stratospheric altitudes has produced a whole new range of public health problems for both civilian and army authorities. Prominent among the problems is the risk of carrying dangerous communicable diseases such as smallpox, rabies, cholera, yellow fever and others into non endemic areas; the problem being that the early incubating case may arrive at a free area long before the disease is detectable, and subsequently become a source of infection in a new otherwise “free” area. Of great interest and worry to an army geared for modern air travel are the problems of circadian rhythms and acclimatisation. The term “circadian rhythms” is “employed to describe changes in biological function which appear to be governed by a timed interval of about 24 hours” McGirr (1966). Workers have shown that following “rapid transit across more than 5 to 7 time zones (the globe is
divided into twenty-four time zones of one hour each for every fifteen meridians of longitude) produces a deterioration of behavioural integrity as judged by reaction and decision times for relatively simple tests" McGirr (1966). This in effect means that the performance of soldiers after being rapidly transported East-West or West-East through 5 or more time zones, will be considerably poorer than normal for 1 to 4 days. This finding could have grave consequences for an army planning to rapidly fly troops into an area involving long East-West or West-East flight.

Similarly, the proven need for acclimatisation of troops to changes in climate (hot or cold) suggests that ideas of “quick reaction” forces held centrally and available for service quickly in any point on the globe may not at present be practical. It would seem that for such operations to be feasible, considerable research and investigation would be required.

In the same vein, future problems for the public health service of the army will include such diverse subjects as diet, clothing, shelter, sanitation, and mental health in extremes of climate, altitude and modes of travel. The list is unending as suggested by Professor Brockington.

Conclusion

The story of Public Health in the army is really complementary with the world wide story of public health. It is a story of man’s “growing-up” and realization that “no man is an island unto himself”, that health, happiness, efficiency and satisfaction in one’s role in life are produced by the interactions of people in the community, the environment in which we live, and the product of the endeavours of man and nature. So it is a dynamic discipline, constantly changing to meet changing needs, but not changing so much that lessons of the past can be ignored, or conversely that the problems ahead are insurmountable.

Perhaps the biggest problem in the story of public health however has not yet been solved, and that is the problem of responsibilities in the task. To get the authorities in both the service and civilian life to be aware that to obtain high standards of health positive action is required of a wide range of people.

“The control or eradication of disease requires the participation and co-operation of large numbers of people of widely different interests, including politicians, administrators, doctors, teachers, and especially the people themselves”. Hobson (1961)

To apply this to the army, the great work of Florence Nightingale, Sidney Herbert and others in establishing better hospitals, an army school of Health, improving the standards of the medical service and establishing the principles of public health, hygiene, sanitation and preventive medicine, must be continued and extended. These principles must be taught over and over again to all branches of the army, at the recruit training units, at the service and arms training schools and particularly at the administrative and staff training institutions. A firm grasp of these principles must become a prerequisite for command at all levels, not only because lessons of the past should be avoided, but also because problems of the future can be better tackled.

BIBLIOGRAPHY

Hobson, W., “The Theory and Practice of Public Health” — preface to 1st Ed.
Long, Gavin, “Official Australian War History 1939-45”.
Longmore, Deputy Inspector-General T., Annual report of the Army Medical Department for the Year 1859, London, HMSO, 1861.
Marriott, Brigadier, H. L., 1946, Army Quarterly 52. 63.
Personal Experiences, Author — 8 Fd Amb Viet-nam 1968-9.
SEATO Military Medical Bulletin, Vol III.
The Holy Bible, Deuteronomy — King James Version.
WHEN the Aircraft Carrier* emerged from the 1914-18 war as a major weapon of war, it was inevitable that the Royal Australian Navy — with the largest island continent in the world to protect — would seek to acquire such a ship for service in Australasian waters.

The RAN first initiated plans for a naval air service in 1913 and, as early as 1917, a move was made to obtain Australia's first aircraft carrier. With the incursion into the Pacific of the German raiders SMSs Wolf — with her Friedrichshafen FF33E seaplane, Wolfchen (or Wolf Cub) — and Seeadler, the Australian Naval Board requested the loan of a carrier similar to HMS Riviera. The Admiralty replied, however, that this was "not possible in the circumstances." In fact, carriers were in such demand at the time that the Royal Navy had taken over an Australian mail steamer, ss Nairana — which was being built in the United Kingdom for the Bass Strait run between Melbourne and Launceston — and converted into a light aircraft carrier which was commissioned as HMS Nairana in September 1917.

During the same year aircraft of the Royal Naval Air Service began operating aboard Australian warships serving with the RN. HMAS Brisbane first embarked a Sopwith Baby seaplane in mid 1917 and, in December, Sopwith Pups were launched from HMASs Sydney and Australia. During 1918 Australia was equipped with a Sopwith 1½ Strutter and a Camel — or, sometimes, two Camels — and Sydney and Melbourne each carried a Camel. When the war ended on November 11, 1918, plans for a Royal Australian Naval Air Service were still in abeyance, and the Australian warships returned their aircraft to the Royal Air Force in 1919, before sailing for home waters.

The postwar period brought a cut in defence spending, and it appeared that many years would pass before Australia could afford to purchase an aircraft carrier. As an interim move, HMAS Australia embarked an Avro 504L seaplane, H3034, in July 1920 for two months, and a second 504L seaplane, H3042, joined HMAS Melbourne on September 29 for a Pacific cruise to New Guinea and Rabaul. These experiments were not a success, however, and the two aircraft were returned to the Australian Air Corps, and were renumbered A3-47 and 48 in 1921.

Plans for a naval air service received a further setback in September 1920 when the Federal Government decided to establish an autonomous air force which would inter alia, provide support for the army and navy. In the event, approval was given for a squadron of "ships aeroplanes" and, in 1921, six Fairey IIID seaplanes were ordered for co-operation with the RAN. They were initially allocated Australian Naval Aircraft serial numbers, ANA-1 to 6, but were renumbered A10-1 to 6 after the Royal Australian Air Force was formed in 1921.
In May 1923, the RAN instituted a special branch of observers, whereby selected navigators underwent a three months course at RAAF Point Cook flying in Avro 504K trainers and Fairey I11D seaplanes. The latter aircraft also participated in fleet exercises, but worked mainly with the sloop HMAS Geranium surveying the Great Barrier Reef. One I11D accompanied Geranium in 1924, and two I11Ds operated from shore bases with the sloop for the 1925 season. As the latter year began, it seemed likely that naval aviation would remain in the doldrums for some time to come, but — within six months — the situation changed dramatically.

In the first instance, three RAN lieutenants started a four year pilot training course at RAAF Point Cook. Six months later the formation of the RAN Fleet Air Arm was promulgated by Navy Order 137-16, June 1925. Then, on June 10, came the surprise defence announcement of the year. While opening Federal Parliament the Governor-General, Lord Stonehaven, revealed that the Government had decided to purchase “a seaplane carrier,” and added that provision had been made for “the aeroplanes and necessary amphibians to equip the seaplane carrier.”

Proof that this untoward announcement came as a shock — particularly in defence quarters — is contained in the forthcoming autobiography of Air Marshal Sir Richard Williams (this important work is being published by the Australian War Memorial, and Sir Richard and the AWM kindly granted permission to quote selected extracts), “In 1926 ... I read in the Press one morning that on the previous day the Government had placed a contract with a dockyard in Sydney for the construction of a seaplane carrier to be known as HMAS Albatross,” recalls Sir Richard. “I had heard nothing of this from the Navy so I sought confirmation of it from the Minister, and when I asked him who was to supply the aircraft he said ‘You will’. He had not mentioned the matter to me previously. This was an extraordinary position.”

The Government’s announcement also caused embarrassment to the RAN because, apparently, an aircraft carrier specification had not been prepared. This confused situation resulted in a cryptic cable being received by the Admiralty Director of Naval Construction which stated, in effect, that it was politically desirable to build a “seaplane carrier” in Australia. The cable then provided the two only known specifications — a speed of 21 knots, and a cost of one million pounds! The Naval Constructor in charge of the Admiralty’s Aircraft Carrier Section is on record as retorting — “a more unsatisfactory way of producing an aircraft carrier I do not know, and cannot imagine.”

What then brought about this unusual political decision that, to all intents and purposes, ignored the two services involved — the RAAF and the RAN? It all began in February 1924 when the British Government informed the Dominions that, for the time being, no further expenditure would be incurred on the Singapore Naval Base. This decision particularly affected the political defence planning of Australia and, as a result, a naval expansion program was immediately initiated.

On June 27, 1924, the Prime Minister, Mr Bruce, announced plans to purchase two 10,000 ton cruisers, and two ocean-going submarines. The Labor Opposition argued that the cruisers should be built in Australia to assist the local shipbuilding industry, as Cockatoo Island Dockyard was about to close down through lack of work. The construction of the cruisers excited a nation-wide controversy and, after prolonged investigations, the Government ordered the two warships from Great Britain, thereby saving more than one million pounds. This money was then used to keep Cockatoo Island Dockyard employed, thus appeasing the Opposition, the public and relieving the shipbuilding depression. So it came about that one million pounds was allotted for the local construction of an aircraft carrier which, the politicians argued, was required to offset the carriers being introduced into the Pacific area by Japan.

Australia’s so-called “seaplane carrier” necessitated much original thought as the design of such a ship had never before been planned from the drawing board stage. The early seaplane carriers of the RN had been improvised versions of ships laid down for other purposes. “You can say that the hull was designed around three holds, three cranes, and
21 knots,” wrote the designer of the Albatross, Constructor Stephen Payne, some years later. Payne had the assistance of a young naval architect, Mr. Woolnough, who was attached to Australia House, London. Woolnough attended the weekly meetings at the Admiralty and, presumably, obtained the necessary information, piecemeal, from Australia as the design progressed. He, at least, ascertained that Albatross would be required to carry a maximum of nine aircraft, although it is not certain what type of aircraft was nominated. It would appear that the designer assumed that the Fairey IIIDs in Australia were the “seaplanes” intended for the “seaplane carrier.” At any rate, the dimensions of the aircraft deck, hatch, and hangars provided sufficient space to operate the IIIDs with their wings folded. The cranes, also, had the capacity to cope with the all-up-weight of the IIIDs. In fact, Jane's Fighting Ships, from 1929 to 1934, annually reported that “at present 6 Fairey machines are carried” aboard Albatross — despite the fact that the last Fairey IID had been phased out of RAAF service in 1929.

Another error has been perpetrated over the years by the assumption that Supermarine Seagull III amphibians were specifically acquired for Albatross. Although six of these aircraft were ordered in 1925, they were purchased to replace the Fairey IIIDs in the Seaplane Training Flight, and for survey work in northern waters. This is borne out in Sir Richard Williams’ memoirs, and substantiated in a statement made by the Minister for Defence, Sir Neville Howse, on July 1, 1926 — “as amphibians were urgently required for training personnel for the seaplane carrier now under construction, and for use this season on the Barrier Reef survey, Seagulls, being the best amphibian type available, were ordered. This number, however, six, was limited to those which would definitely be used up in training, it being anticipated that improved types would be available when the time arrives to order aircraft for the seaplane carrier.”

To accommodate nine of these unknown “improved types,” Albatross was designed with a high freeboard forward, which contained three holds, or hangars. Each hold contained space to store three aircraft, of similar measurements to the IID. Three cranes were positioned on the aircraft deck, above the holds, for hoisting aircraft up from the aft hangar, lowering them over the side for takeoff, retrieving them after landing alongside, and returning them to the hangars below deck. Provision was also made in the bow for the installation, at a later date, of a catapult for launching aircraft that were strengthened for this purpose. Of necessity, the ship’s bridge, machinery, crew quarters, and boats were placed...
A 1931 photograph, showing the light area marked out for the flight deck, and the circular installation adjacent to the forward crane where an E III H catapult was installed in 1936.

Anchored off Garden Island on 19 March 1932, dressed overall for the opening of the Sydney Harbour Bridge. Three Supermarine Seagull III amphibians are ranged on deck.
Photographs of the Seagull V using Albatross' catapult have not been located, but this view of A2-1 being launched from the E III H catapult from the cruiser HMAS Canberra depicts the technique.

During the same month the six Seagull III amphibians, A9-1 to 6, arrived by ship in Australia and were erected and tested at RAAF Point Cook. On July 1 the Seagulls were allotted to the newly formed No. 101 (Fleet Co-operation) Flight and, a few months later, the flight moved to RAAF Richmond under the command of Flight Lieutenant A. E. Hempel. The Fairey IIIIDs still in service remained at Point Cook as seaplane trainers.

While Albatross was under construction from 1926 to 1928, No. 101 (Fleet Co-operation) Flight moved to Bowen, Queensland, where a coastal base was established for the Seagull IIIIs to work with the survey ship HMAS Moresby, on the Great Barrier Reef project until late 1928. Meanwhile, three ex-RAF Seagull IIIIs were acquired in 1927, and renumbered A9-7 to 9. Reporting their arrival at Point Cook in January, Aircraft added that “... it is still a little early to talk about equipment for the aircraft carrier which is now being built at Cockatoo Dock, NSW.”

With the extra Seagulls in service, the RAAF extended survey flying to New Guinea in late 1927.

On Thursday, February 23, 1928 — the day after H. J. L. (Bert) Hinkler, completed the first solo flight from England to Australia in Avro 581E Avian, G-EOBV — Australia's first aircraft carrier was launched at Cockatoo Island Dockyard by the Governor-General's wife. “I name this ship Albatross,” declared Lady Stonehaven. “I am proud that she is the result of Australian workmanship, and I congratulate those who have so faithfully and skilfully constructed her. May she prove a valuable addition to the Royal Australian Navy.” The Sydney Mail reported that “Albatross glided down the ways in stately fashion to the accompaniment of cheers by the large crowd of spectators, and the strains of Advance Australia Fair played by the Naval Band.”

During the speeches, the Chairman of the Commonwealth Shipping Board, Mr Larkin, observed that “one and all hoped that the seaplane carrier would have a peaceful life, and would never have to be used in warfare.”
— a hope, unfortunately, that did not eventuate.

The previous month, January 1928, Cabinet decided not to approve authority for the continuation of the RAN FAA, thus negating the decision made in 1925. It was decided, instead, that the RAAF would provide the aircraft, pilots, and maintenance personnel for the new carrier, and the RAN the observers and telegraphists. Naval officers, however, could train as pilots for RAAF service if circumstances permitted — although this was also discontinued in the 1930s. In the event the Navy was given operational control of embarked RAAF aircraft, a system that remained in force until 1944.

Albatross, the twelfth ship of the name, was completed in December 1928. On her trials, during the same month, she exceeded the required speed of 21 knots, and 22.5 knots was attained with 12,910 hp. The ship's machinery comprised Parsons geared turbines with two shafts, the designed horsepower being 12,000, and four Yarrow boilers were installed. Dimensions included a length of 443½ ft., a beam of 60 ft., and a draught of 16½ ft. Standard displacement was 4800 tons. Armament comprised four 4.7 inch anti-aircraft guns, and two 2 pdr pom-pom guns. The ship’s complement numbered 450, including six officers and 24 other ranks from the RAAF.

HMAS Albatross commissioned at Sydney on January 23, 1929, under the command of Captain D. M. T. Bedford, RN. A month later the carrier positioned at Port Phillip where aircraft stores, and personnel, of No. 101 (Fleet Co-operation) Flight embarked on February 21. On the 25th, six Seagull IIIs were hoisted aboard at Geelong — and, more than one RAAF officer heaved a sigh of relief to see the folded-wing aircraft lowered through the 41 ft. x 20 ft. hatch and into the hangars, albeit the fit was close! By coincidence, the Fairey IIID (span 46 ft. 11½ in., length 37 ft.,

A Seagull III, engine running, is about to be lowered for takeoff from the sea. Note two other aircraft on deck awaiting their turn.
height 11 ft. 4 in.), and the Seagull III (span 46 ft., length 37 ft., height 12 ft) possessed almost the same dimensions, particularly when their wings were folded.

No sooner had Albatross joined the Fleet than she was called upon to assist in the search for Kingsford Smith’s Southern Cross, G-AUSU, lost near Wyndham on March 31, 1929. As the days slipped by with no trace being found of the Fokker F.VIIb-3m, the Minister for Defence, Sir William Glasgow, ordered HMAS Albatross, and her Seagulls, to proceed from Sydney with all possible speed to Wyndham. The entire crew of the carrier was recalled from leave, and Albatross sailed on April 11 for her dash to the west. Shortly after her departure, however, Captain L. H. Holden in the DH61, Canberra, G-AUHW, located the Southern Cross on April 12, and Albatross was ordered back to Sydney.

Working up exercises for HMAS Albatross were carried out in Australian waters where the carrier, and her aircraft, operated as a reconnaissance element for the new 10,000 ton cruisers HMASs Australia and Canberra which, at that time, did not carry aircraft. In June 1929, combined manoeuvres took place with the Royal New Zealand Navy cruisers Dunedin and Diomede. Rear-Admiral E. Evans (later Admiral Lord Mountevans), commanding the Australian Squadron, was most impressed with the performance of Albatross, and her aircraft. So much so, that during the concluding sports regatta at Hervey Bay, north of Brisbane, he gave permission for a special race for the Seagulls. The event was decided on a time basis, and the amphibians roared around the course at low level in full view of the RAN and RNZN ships anchored in the bay. As Lieutenant-Commander G. W. R. Nicholl, RN, remarked in his book, The Supermarine Walrus, “... it is difficult to imagine Their Lordships of the time approving a similar contest in the Royal Navy!”

In July and August Albatross made a vice-regal tour of the New Guinea area with Lord and Lady Stonehaven. In addition to her Seagulls, Albatross embarked the Wackett Widgeon II for tropic trials. Meanwhile, the Chief
A civilian interloper temporarily carried aboard Albatross was Francis Chichester's DH Gipsy Moth seaplane, here seen being towed in Sydney Harbour after being carried from Jervis Bay in June 1931.

of the Air Staff, Air Commodore R. Williams, had already initiated action to replace the wooden-hulled Seagull III's in Albatross. "I obtained the dimensions of the hangar and the capacity of the crane — anything which affected the handling of aircraft in and out of the ship," recalls Sir Richard in his memoirs. "... with the assistance of my Director of Technical Services, then Wing Commander H. C. Harrison, we drew up a specification of the aircraft we would need." The resultant specification — an air-cooled pusher engined boat amphibian, of metal construction, strengthened for catapulting, fitted with folding wings, with provision for a crew of three, and of such dimensions as to operate from Albatross — was submitted in 1929. This aircraft eventually materialised as the RAAF's Supermarine Type 236 Seagull V of 1933 and, later, the RAF's and FAA's Walrus I of 1935, and wooden-hulled Walrus II of 1941.

Meanwhile, in November 1929, Albatross took part in combined exercises with the RAN and RAAF, in Port Phillip Bay. The Seagull III crews opened the mock war with an early morning attack on their erstwhile friends at Point Cook and Laverton. They then maintained patrols over the RAAF bases to alert the fleet of retaliatory raids.

In December, Squadron Leader V. R. Scriven, a RAF exchange officer, took over from Squadron Leader Hempel as No. 101 (Fleet Co-operation) Flight's Commanding Officer, and Senior Air Officer aboard Albatross. The flight comprised one squadron leader, one flight lieutenant and three flying officers, all of the General Duties branch. These five pilots — Albatross carried a maximum of six Seagull III's only, one of which was a reserve aircraft — were allotted five naval officers as observers. The RAAF also provided a Stores and Accounting branch flying officer, and 24 non-commissioned officers and airmen of eight trade mustings. In addition, six RAN telegraphist air-gunnery were attached to the flight.

No. 101 (Fleet Co-operation) Flight re-embarked in Albatross during May, 1930, after spending a month at RAAF Richmond. The carrier then departed on a second exten-
sive cruise to New Guinea and the Mandated Territories. In August, Captain H. J. Feakes, RAN, assumed command of *Albatross* from Captain Bedford. Late in 1930 the carrier visited Adelaide, Port Lincoln, Port Pirie and Wallaroo for the first time. The close of the year also brought the first effects of the depression, and the RAN sea-going squadron was reduced to *Australia*, *Canberra*, *Albatross*, and one "S" class destroyer.

For the next two years, *Albatross* continued to operate along much the same lines as she had done during 1929–30; winter cruises to the New Guinea area, spring cruises to southern states, training exercises, and combined operations. In February 1931, Squadron Leader J. E. Hewitt took over command of No. 101 (Fleet Co-operation) Flight from Squadron Leader Scriven, and Captain C. J. Pope, RAN, replaced Captain Feakes aboard *Albatross* in August 1931.

The full impact of the depression had reached Australia by 1933 and, on April 23, HMAS *Albatross* was paid off into the Reserve Fleet. For the next five years the aircraft carrier was either swinging at anchor in Sydney Harbor, or berthed at Garden Island. Ironically, the prototype Supermarine Seagull V — the amphibian specially designed for *Albatross* to Air Commodore Williams’ specification — took to the air for the first time on June 21, 1933, two months after *Albatross* was laid up.

Early in 1936 an E III H catapult was fitted to *Albatross* at Garden Island, in anticipation of the carrier being recommissioned by the time the first of the 24 Seagull Vs had arrived in Australia. But, it was not to be. Apparently, catapult trials were carried out with a Seagull V in August 1936 — although the author has yet to locate photographs of this historic event. *Albatross* remained in reserve until April 19, 1938, when she was accepted by the Admiralty as part payment for the new cruiser, HMAS *Hobart*; as from 1936 all the RAN cruisers — *Australia*, *Canberra*, *Sydney*, *Hobart* and *Perth* were equipped with their own Seagull V amphibian, thus negating the requirement for *Albatross*. Flying her paying-off pennant, HMAS *Albatross* sailed from Sydney under the command of Captain H. G. D. Acland, RN, on July 11, 1938. As she proceeded down the harbor, the carrier was farewelled by a formation of Seagull V amphibians of the No. 5 (Fleet Co-operation) Squadron, commanded by Squadron Leader C. B. Wincott, RAF, from RAAF Richmond — this squadron was
formed from the No. 101 (Fleet Co-operation) Flight on April 20, 1936, and it was subsequently renumbered No. 9 (Fleet Co-operation) Squadron on January 1, 1939.

Although Albatross severed connections with the RAN in 1938, her subsequent history is full of interest. On October 6, 1938, the carrier was commissioned in the RN as HMS Albatross for trials at Devonport, and was then placed in reserve on November 30, 1938. HMS Albatross recommissioned on August 25, 1939—due to shortages she had no catapult installed—and embarked No. 710 Squadron, FAA, comprising six Supermarine Walrus 1 amphibians. She then sailed for war service in the South Atlantic, West Africa, and Madagascar areas. In 1940 a catapult was reinstalled, and in 1941-42 Albatross underwent a refit in America. In 1943 the carrier returned to England, was paid off, and the catapult was again removed. In 1944 HMS Albatross joined the Home Fleet as a repair ship, and took part in the Allied invasion of Normandy. On August 11, Albatross was hit by a torpedo off Courseulles and casualties exceeded 100, including 50 killed. The ship also destroyed a Junkers Ju. 88, and two shore batteries. HMS Albatross joined the Reserve Fleet in January 1945 at Portsmouth, and later Falmouth.

In 1946 Albatross was sold to a British company which planned to convert her into a passenger luxury cruiser. When conversion costs became too high, it was decided to use Albatross as an off-shore floating cabaret at Torquay on the Devonshire coast. The ship was saved this fate when it was bought by the Greek-British Yannoulatos Group of shipowners on the day Prince Charles was born and, in whose honour, she was renamed Hellenic Prince. She was then converted to a passenger vessel and, in 1949, was chartered by the International Refugee Organisation. Carrying 1000 displaced persons, the ship returned to Sydney on December 5, 1949, where she had first taken the water some 21 years previously in 1928. Hellenic Prince was finally scrapped at Hongkong on August 12, 1954.

Although the genesis of naval air power in Australia is closely associated with the RAN's first aircraft carrier, the warship was almost forgotten by the nation she served. That is, until August 31, 1948, when the Naval Air Station at Nowra, NSW, was commissioned as HMAS Albatross. RANAS Nowra is the shore support base for the RAN FAA, and it is most appropriate that the station perpetuates the name HMAS Albatross—the first of the line.
The popular image of flying is strongly that of a life-style as opposed merely to that of an occupation. The distinguishing feature between these two concepts is that, with the former, greater significance is attributed to attitudes, traditions, style and continuity, than to the objective functions and discipline of a particular field of activity. In many cases the popular image is a notoriously unreliable measure. Perhaps the best test of its authenticity is the extent of coincidence between the popular view and the professional one, and the degree of correlation between the image of the activity and the history which precedes it.

In the case of aviation, and the somewhat nebulous criteria of a life-style, the history, the professional view and the popular image of the activity overlap to a considerable extent. In its evolution this image has been influenced more by the early history of flying than by its contemporary development. It has also been significantly conditioned by what people remember and by the way they have communicated their experiences. There is in fact a developed and deeply ingrained folklore which has fundamentally conditioned contemporary attitudes to flying and, more particularly, to the flier.

Although historical facts are an important aspect in its development, folklore depends even more on beliefs and these often grow out of events or experiences which may not have been written down and attitudes which have not otherwise been recorded. This process, for all its informality, creates traditions which are quite as influential as the recorded historical facts. Thus it is that the folklore of aviation, in some areas, has influenced our appreciation of it quite as much as the written historical records have done.

The folklore of aviation has its roots partly in historical circumstances. From the time the Wright brothers accomplished the first free flight in a power driven heavier-than-air machine only 11 years passed before the first generations of their primitive aircraft were catapulted into the largest and most technological war the world had ever known. The manner in which these machines came into prominence; the speed with which they developed; and the quality of their activities combined to make a singular impact on a popular consciousness which had yet to be conditioned or sated by many comparable developments.

In the early part of the 20th century flying attracted the individualist, the eccentric, sometimes the irresponsible and frequently the outspoken. These pioneers themselves established the aviator's image, partly by their idiosyncratic behaviour and partly by their own accounts of it. Since many of their activities were by their nature individual and unwitnessed it was unavoidable that this image, to a very great extent, should be self-created. It derived though from some tangible factors.

The character of the pre-war pioneers and the quality of their machines still colour many of our present attitudes to flying. The image of proceeding "on a wing and a prayer", for example, is historically well founded. It was born of two picturesque uncertainties. Would the machine fly and, if it would, could the pilot? As far as the machine was concerned the manufacturer could have little certainty...
and no insurance. He built one aircraft and this served as the prototype, test machine and production model. It was therefore with wry humour that an early monoplane of Handley Page design was nicknamed "the Yellow Peril". The pilots were as ill-prepared for taking to the air as their machines. The apotheosis of their careless spirit may have been Edward Petre, whose first flight risked not only his quite replaceable life — for there were numerous willing substitutes — but also Handley Page's irreplaceable machine.

Edward got up and he got in . . . this "Yellow Peril" and all of a sudden he was trying the controls. He was working the empennage and working the rudder. All of a sudden he opened up the engine full. The (machine) nearly went over the chocks and (I) shouted out "What arc you up to Edward? What the devil are you up to there? Come you out! Come you! . . . But Edward didn't take no notice. He simply opened up and revved up and he went over the chocks and away it went. He ran about two hundred yards and he was in the air. Edward was in the air . . . and he flew that machine as an experienced man. He turned it round and climbed (and) away he went . . . Next thing we heard that he'd landed in Brooklands . . . and when he landed he was interviewed by an official in Brooklands aerodrome. And he got severely reprimanded. And they was going to charge him with flying a machine without a licence, because he had no licence and that was his first time in the air.1

The men who built and flew the early flying machines are acknowledged visionaries, but to a great extent the challenge which motivated them was more immediate, deeply personal and often quite frivolous. In some respects they were the "ton-up kids" of their generation and many of their exploits reflect this character. This feature of flying was widely demonstrated before the war at many public flying displays. These gatherings, which gave a tenuous source of income to the manufacturers, provided the pilots — who were the performers — with a circus in which to display their tricks.

The main feature as far as I can recall was this racing round the pylons . . . the pilots would take off and they would have to do so many circuits. And of course there was handicapping went on. The slower machines went off first and they would tear round these (pylons). Mind you, they used to fly very close to the ground. The best pilots would fly with their wing tip three feet from the ground and three feet from the pylons as they went round the corner on pretty steep banks. And this of course made very spectacular flying, especially as . . . the pilots were sitting out in the open mostly. You could almost see the expression on his face and you would see him peering over his shoulder to see where the next fellow was and then they'd dodge over the man in front. When they overtook . . . they didn't dare go underneath — because they were too low — but over the top was the usual thing. You would get behind the chap, try and get at his blind spot, climb up behind him and then dive down in front of him. Frighten the daylight out of him so that he swung out of the circuit . . . and you took his place. That seemed to be the drill . . . And of course the more spectacular they could make it the bigger the draw.2

This tendency to self-exhibition was not confined to the civilian pilots. It was quite as evident when, from 1914, flying began to be more hurriedly adapted to the needs of war. Even the discipline and constraints of military life did little to blunt the identifiable exhibitionism of the aviator.

An aeroplane pilot decided to do a spectacular stunt and, seeing both doors of one of our big airship hangars wide open, flew his aeroplane right through the hangar . . . This was a source of envy to another pilot who had, in fact, a bit of a chip on his shoulder and thought he would improve his prestige if he did the same . . . Well, he seeing that the hangar door was open at one end and that the mechanics were opening the door at the other end . . . he thought his opportunity had arisen to do this. What he didn't know was that the . . . end doors being opened were only being opened just wide enough to get one aeroplane out of storage and would then be closed up again. And while he was circling around this happened. So when he got himself into his dive
to go slap through the hangar and was well between the windscreens and low down at a height to go through the doors... he saw to his horror that the far end was closed. And so this made him instantly decide that he couldn’t escape in any way except by throwing himself at all the stored planes, which he did. They acted as a pleasant shock absorber for him and, when he had crushed most of them against the fire doors of the hangar and wrecked a lot of them, he climbed out, quite uninjured but somewhat shaken, with his prestige not greatly improved.  

The identity of spirit which characterised civilian, military and naval aviation was hardly surprising under the contemporary circumstances. Flying was the enthusiasm of a small and closely knit community. The great expansion of the military and naval air services, and the rapid technological developments which followed the outbreak of war, were firmly based on the civilian pioneering work which preceded it. Most of the original war planes, for example, were of civilian construction and had not been designed to military specifications. Similarly, the main civilian flying centres, such as Eastchurch, Hendon and Brooklands, provided the only ready-made additional airfields to accommodate the expansion of military flying and training that took place. Above all else though, it was the aviators themselves who ensured that flying, whether in a civilian or military context, retained the same fundamental ethos. For the pre-war cavaliers of flying provided an important corpus of experience both in the Royal Flying Corps and the Royal Naval Air Service after war broke out. With the civilian flying schools also opening their doors more widely to an influx of regular and volunteer servicemen, military and naval training as well as the operational squadrons came under the strong influence of the civilian pioneers.  

The result was an intrusion of a most unmilitary influence which would have been difficult enough for the traditional arms of the two services to absorb. On the air branches of the Navy and Army, which had been created but two years earlier, the effect of this influence was dramatic and in some ways permanent. The traditions already developing...
before the war were transferred directly into the embryo air service where they matured in much the same character as they had first been formed.

Perhaps the main reason for this continuity of spirit was that after war broke out flying continued to attract the same kind of people. Moreover, from 1914 the military and naval air services increasingly offered a great many more flying enthusiasts opportunities which previously had been confined mainly to those who had the money to indulge this expensive appetite. The sense of patriotism which impelled young men to rush to volunteer for the other arms of the services, was no less lively in candidates for the Royal Flying Corps and the Royal Naval Air Service. But there was for them an additional incentive. They wanted to fly.

I was always very interested in flying right back from about 1912 when I used to go to Hendon to watch the flying which was going on there. I was also interested in Ballooning because I was born within sight of the Alexandra Palace where regular balloon flights used to take place at Bank Holidays and other occasions. Another reason was that I had a brother who was in the Admiralty — he was several years older than I was. He was called ur> and he went into the airship service for a time. So I was interested both in the naval side of aviation and to some extent in airships. So really I think both those circumstances induced me to try to get into the Naval Air Service. My real reason in fact was that I wanted to fly.4

With a wave of eager volunteers available, the two air services were able to be highly selective in those they chose and the standard of their personnel therefore became extremely high. This selectivity reinforced the aviator's natural predilection to regard themselves as corps d'élite.

The first thing I did was to go and report at the War Office ... only to get a cold bucket thrown over me by being told that the Royal Flying Corps was a very exclusive Corps; that it had frightfully hand picked people in it; and the only people who could get into the Royal Flying Corps were people who were seconded from the regular regiments and, not only that, from the better class of regular regiments. And so that was that.5

Thus it was that both the RFC and the RNAS came to develop very early a special sense of tradition and exclusiveness. Such feelings were not confined to the aviators alone. They pervaded the two air services at all their levels and in all their activities.

Everyone who joined in the Royal Flying Corps held some trade or other. The men in the general regiments . . . might be anyone. But all us recruits in the RFC had some kind of training or apprenticeships . . . and therefore we did consider ourselves a bit superior to the others . . . There was a wonderful spirit of comradeship but at the same time we did feel ourselves superior to the infantry and the cavalry who may have come from any walks of life.6

Other traits which characterised pre-war civilian flying were also readily detectable in the military and naval air services. In the area of training, for example, the essential individualism of flying stood out. The main reason for this was that aviation was still a pioneering field. Competence and experience in the period from 1914 to 1918 were very relative things and the instructors frequently had little more of either than their students. Both were still pioneers and as a result it was practically impossible to formalise flying training to any great extent. The level to which instruction could extend was very quickly reached, owing to the limitations of the aircraft as well as the instructors, and beyond this level the aspirant aviators were on their own.

You couldn't say there was such a thing as formal instruction at all . . . You were just feeling your way by trial and error — with a good deal of trial and as little error as you could manage. There were always one or two senior people . . . who perhaps (would) come up with you on your first flight. He'd come as a passenger just to make sure you could land the thing on the water, and watch you from the shore (for) your first flight or two and see if you made any howling blunders and mention it to you. But after that it was more or less a case of — rather like when you're young being chucked into the deep end and knowing you've damn
well got to swim. We just trained ourselves on the kind of basis of mutual self help.\footnote{7}

As flying skills could not be taught to any sophisticated degree, pilots had necessarily to learn from their own experience. This process inevitably had many catastrophes and these contributed substantially to an image of flying which the aviators did little to discourage when recounting them.

I thought I'll do something that nobody else has ever done. I will loop off the ground . . . Now my aircraft went to its maximum speed level at about 70 miles per hour. But I thought now, if I hold it down just over the top of the grass until I'm going flat out, I can then go in a very big loop, pull it up and when I get to the top, pull the joystick into my tummy, whip the tail over and then gravity plus the engine will pull me round. And I will be the first man in the world to loop (off the ground). That morning I went off and tried this . . . There were some sheep which were grazing on the far end of the grass airfield. There was a bean field which just came in at the corner (of the airfield); the beans were about two feet high. And this Bristol Bullet . . . I pulled up on top of the loop, I flipped in and I realised then that I hadn't enough room. There was nothing else to do about it. But I saw the sheep and to my astonishment they all started to run out, star fashion, away from me. That I'm certain saved my life because I was so interested in the sheep that I didn't stiffen myself up when the crash came. I went straight into the deck . . . ; I shot right through the front of the aircraft; my belt broke; I was knocked out but my legs had shot through this rotary engine . . . Had that thing turned another quarter of a turn I would have lost both my legs. As it was I finished up with the engine between my crutch . . . And the only thing one could see of the aeroplane above the bean field was the very tip of the rudder. The ground was hard and not one bit (of the aeroplane) had sunk more than a few inches into the earth. It was flattened like a pancake. My CO seeing this . . . strolled slowly across to the crash and when he got there he found me singing . . . the latest song of the time which was \"Sprinkle me with kisses,\nA lot of loving kisses\nIf you want my love to grow\".\footnote{8}

With flying still at an essentially experimental phrase this process of trial and error was quite unavoidable. It was moreover a process which was greatly accelerated by the needs of war. For, in the application of both pilots and aircraft to military purposes, tasks were set which were altogether more complex than those which the pre-war aviators had set for themselves. Often the goals were quite beyond the capability of contemporary technology, and it was mainly for this reason that the impact of air power on the war effort was relatively slight. But there were successes which demonstrated and reinforced the image of the aviator as an individualist, stretching himself and his machine to the limits.

An aeroplane throws out a slipstream from its propellers — and we need to come up behind feeling the slipstream on our top wing, which just shook the Camel a little bit, and then you knew you were just underneath the slip-stream. Well if you were just in that point and you were coming up straight behind him he couldn't shoot at you because he had no gun actually in his tail; his back gun was from underneath the fuselage which meant he had to shoot down at a slight angle. He couldn't shoot straight behind. So that gave you a very narrow angle, which got narrower as you got in, that you were immune from being hit. And if you could control yourself enough to get up little bit by little bit by little bit, he couldn't hit you and probably didn't know you were there because he couldn't see you either. And then you opened fire . . . (from) about twenty five yards if you had enough nerve to get in as near as that; and the successful ones did. If you shot, from further away you'd probably miss . . . The whole secret of the thing was to have the patience to get in close after you'd been lucky enough to find your Hun.\footnote{9}

More often the initiative of the pilots in developing their skills and their machines was less spectacular than this. Given that their aircraft and equipment were inadequate for many of the roles they were expected to carry out, the military and naval aviators showed a
remarkable and sometimes bizarre genius for invention by making appropriate modifications themselves in the field.

I don’t remember any machine coming out fitted with bomb racks. They used to send bomb racks out. On my small machine I took on four twenty pound bombs. I fitted a bomb rack just behind the engine under the fuselage. No bomb sights or anything like that. There was a hole in the floor of the fuselage, and I used to squint down through that and when I could see the target I let the bombs go and sometimes I pulled the machine up too much and the bombs bounced off my axle. But it didn’t seem to do any damage.

There was a Serbian Pilot attached to the French flight. He was an absolute fanatic against the Bulgarians, he loathed them. And he used to borrow bombs from me and his bomb rack. I suppose, only four or possibly, he had one under each wing; he probably took six bombs. But that wasn’t enough for him. He’d cut out the passenger seat and used to stack the inside of his nacelle with bombs — incidentally, this was a Maurice Farman Shorthorn — and he would take up a walking stick with a crooked handle and when he’d dropped the bombs off his wings he would then take the walking stick and hook my bombs alongside him, he’d pick it up — they were only small bombs — and he’d spin the safety fan off and then throw the bomb overboard.

Despite their many technical deficiencies an important part of the image of flying must be attributed to the character of the early aircraft and the impact which they made on their pilots. The relationship between men and machines was personal to a degree that is difficult to grasp by those who were not actively involved in this era of flying. In this relationship the cycle of cause and effect is difficult to analyse. Certainly many of the early aviators were unashamed romantics and the tendency to personalize the machines which made their adventures possible came quite naturally to them. But equally clearly the aircraft had intrinsic qualities which stimulated emotive reactions to them at least as much as scientific curiosity about speed, range, rate of climb and other factors of performance.

To me it was at once my favourite aeroplane and it remained the whole time. It was an absolute beauty. She really was, of course, a glider with an engine in it, but she had no bad manners; unlike the Camel (which) for some reason or other the torque of the engine twisted . . . and she’d always turn to the right more under control than to the left. If you turned to the left you had to watch that you didn’t get into steeper turn than you wanted, and so on. The (Sopwith) Triplane was in every atom of her control smooth; but of course you realised that you mustn’t play any tricks with her because, I think I’m right, the safety factor was only three and a half. There was only one set of flying wires for instance and they didn’t even connect with the middle plane and . . . when I was diving very hard . . . the strain on the centre section, you could almost see a curve on it. Allowing for that, and why not, allow for the fact that she was by no means as strong as for instance the SE5, you could sit back and enjoy flying her. She was so delightful . . . I remember one shocking occasion, when it was very hot and there was a ground haze which climbs up with you the whole time . . . and the horizon is always level with you. I was coming home from a very high patrol which we’d broken off really high up — something about seventeen or eighteen thousand (feet) — and then the trouble was to put this old Sopwith Triplane down to the ground. You could always spin in; for instance in a Nieuport — you spun down. But never, never, never with a Triplane . . . And believe it or not I went to sleep. Only momentarily . . . To my horror I suddenly realised I couldn’t recognise the ground below me. Really the culprit was the manner of the Triplane. She was so beautiful . . . I was really heartbroken at leaving my Triplane. And I only flew once (more), nostalgically, at Eastchurch I went up in one. But she was still the most glorious thing to fly.

As the aircraft themselves came to acquire more than a mechanical identity, so many of the men who flew them came to assume almost larger than life proportions. The military and naval branches of the armed services have their heroes, but in neither of them is there
A Scopwith Pup at Point Cook. The type of aircraft in which James McCudden, VC, demonstrated his flying ability.

(Courtesy Defence Public Relations)

anything quite comparable to the concept of the air ace. Such men, though usually of junior rank, captured and retained the public imagination and have remained almost as well known outside the air services as within them. The qualities and activities which established the reputations of these aces of the air are well illustrated by one contemporary pilot’s recollections of James McCudden, VC.

He was a brilliant pilot; absolutely outstanding. I had enormous admiration for his flying ability and I’ve seen him do the most hair-raising stunts around the aerodrome when he was demonstrating what a Pup could do. His favourite one was to loop directly off the ground when he was taking off and continue looping. On one occasion he looped thirteen times from take off. Just straight off the ground and when he’s finished he was about 500 feet high. It was a wonderful piece of flying. And then he used to fly upside down. He’d go up to about a thousand feet, turn the machine upside down; just go around the aerodrome upside down till the engine stopped. Then he’s go on gliding and next thing he’d roll it out and get the engine going again, away he’d go and, oh, he was absolutely marvellous; there wasn’t a thing he couldn’t do with that machine. And we all admired him tremendously.

He was at Dover at the time of one of the Gotha raids on London. When the readiness went he went off; he went almost mad. Rushing around. His Vickers gun was not loaded; the belt wasn’t loaded. But he had a Lewis gun on the top plane which he used to fire and he dashed around, grabbing magazines of ammunition — all he could get from various mechanics and stuck these around the wire in his cockpit and away he went. We heard that he’d tackled the Gotha formation before it reached London and he’d dived in amongst them and managed to separate some of the machines and help to break up the formation. He then ran out of ammunition, but continued to dive in amongst the formation further dispersing them. A most outstanding and brave deed for any man.32

A powerful reason why the aviators of World War I established for themselves a unique reputation, was because their exploits in the air so greatly contrasted with the war on the
ground. The numbers of foot soldiers were measured in millions, while the airmen were by comparison a mere handful; the battles on the ground were massive impersonal confrontations, while those in the air were fought by identifiable individuals; battlefield casualties were so enormous that they became anonymous lists of statistics, while air losses were of a contrastingly conceivable order. In a way the war in the air was a different war, allowing as it did scope for humour, chivalry and human reactions which had not been crushed by mechanised, mass human slaughter.

One of our gallant officers who was flying an FE2b flew over on the 1st April, over a German aerodrome, and over it he dropped a football. He just dropped it over and hared back to our lines. One can imagine the terrible sight of this slow moving “bomb” coming down from about 5,000 feet, landing on the aerodrome, all the Boche running for cover, waiting for the explosion and then comes the big bounce. When they picked the ball up on the football was printed April the 1st.

There was a sort of code, I think, merely between flying people — whether they were German or British. There was a great comradeship, if you can call it, between them. I had a flight commander who was named Maxwell Pike and he went up and was shot down in flames and that was the end of Maxwell Pike. But two days afterwards a German aeroplane came over, dropped a message bag and told us that "The gallant Captain Pike was shot down in mortal combat and has been buried behind our lines with full military honours". That is the sort of esprit d'aviator I suppose you'd say. That spirit it held on, I think, to the very end.

Flying developed enormously in the four hectic years of activity stimulated by World War I. At the end of this period it was in many ways no longer recognisable as the pre-war haven of a small group of eccentric sportsmen. Only four years had elapsed since the Royal Flying Corps and the Royal Naval Air Service could together muster only a little over a hundred operational machines at the outbreak of war. Yet by 1918 the two air services had grown sufficiently to be constituted, as the Royal Air Force, a new and independent service with a strength of 22,647 aircraft and 293,532 officers and men. But while a great deal had changed in terms of material and manpower the essential character of flying remained little altered. Thus it was that new generations of aviators remained in spirit motivated by much the same impulse which was, for one pre-war pilot, crystallised in Samuel Cody's injunction—

Warp the wings. Warp the wings. Imitate the birds, my boy, imitate the birds.  

Most of the characteristics and traditions of the aviator which have been described in this article are well known, even to those with no historical interest in flying. They are simply general knowledge. But it is not so much in the technical advances of aviation, its organisation, scale and rate of development that we can find the origins of this image of flying. It can be traced more through the personal reactions of individuals to the kind of events, which have been described above, from which the traditions have grown. It is due to the fact that their reactions were so deeply and strongly personal that they have been sustained in what I describe as the folklore of aviation.

The author wishes to thank the contributors to the Imperial War Museum's aviation recording project, listed below, who have been quoted in this article.

NOTES

2. E. J. Furlong Esq. (RFC) IWM Reference 000015/08/02.
4. F. W. Verry (RNAS) IWM Reference 000311/07/01.
5. C. J. Chabot Esq. (RFC) IWM Reference 000008/14/01.
9. A. B. Yuille Esq., DFC (RFC) IWM Reference 000320/04/03.
10. F. D. H. Bremner (RNAS) IWM 000004/09/04 and 06.
11. Sir Herbert Thompson, CIE (RNAS) IWM Reference 000308/06/01.
12. J. C. F. Hopkins (RFC) IWM Reference 000021/05/06.
14. G. Donald Esq. (RNAS) IWM Reference 000018/11/01.
FOUR years ago, for a period of just over three years, I led a production team at Army Headquarters. This team was known as the audio visual section and had a responsibility to produce audio visual sequences for the army. An audio visual sequence is a set of 35 mm slides with a synchronised tape recorded commentary. The Audio Visual Section was designed to be a central production agency which could use the expertise and resources already available in that section of the Directorate of Military Training (as it was then known) in which it was located. It functioned by receiving requests for sequences from various army sources and then producing sequences sponsored by the appropriate directorate or army school. It was, I think, a successful programme, and as far as I know, it is still operating.

There is a need in military instruction for instructors to be able to prepare one-of-a-kind, simple sequences for themselves, as well as the continuing need for a central facility to handle the more complex and the more technically difficult sequences and also those sequences with wide appeal which can be duplicated in large numbers and distributed widely (e.g. map reading). This first need could be met by allowing instructors access to two relatively cheap pieces of equipment, in addition to the currently available automatic slide projectors (e.g. Haninex or Paxinset). These two pieces of equipment are a camera kit (e.g. the Kodak Visual Maker) and a Synchronised Cassette Recorder (e.g. the Haninex Synchro-recorder). The effectiveness and versatility provided for unit instructors by these two pieces of equipment, can be demonstrated by outlining the production of an audio visual sequence.

Two main types of sequences may be produced. Firstly, a sequence using the principles of programmed learning, in which the sequence is constructed so that the material to be taught is broken down into easily assimilable parts; the parts are arranged in order of progression; provision for students' responses is made after each stage of learning; and immediate reinforcement is given for correct responses. Secondly, a sequence which is in the form of an illustrated lecture, or visuals with commentary added, may be produced. These two types of sequences may be presented in many different ways. Some of these ways are:

- to stand up and talk using display boards, chalk boards, pictures or charts
- overhead projector transparencies synchronised with a reel to reel tape recording
- a film strip and microgroove disc recording to be used in a machine such as the Dukane; any of the different moving films
now available — 70 mm, 35 mm, 16 mm, super 8 mm and 8 mm
• a microfiche reader synchronised with a cassette recording
• a live television presentation of a videotaped reproduction; and a radio presentation integrated with notes and/or pictures and diagrams.

The method of expression that I am advocating for instructors is an automatic slide projector synchronised with a cassette synchroniser. This method of expression utilises only two pieces of equipment. At present three pieces of equipment are required as the synchroniser is a separate item not included in the tape recorder/reproducer.

Audio visual sequences are already well known in the army. Apart from those prepared and distributed centrally, there are quite a few sequences available commercially. Package deals for new equipment often include training aids such as films and manuals and increasingly audio visual sequences.

There are ten steps in the production of a sequence. They are Definition, Analysis, Story Board, Art Work, Photography, Recording Preview, Testing, Review and Instructors’ Notes. These steps are not meant to be definitive or prescriptive. This is only one method of production, as a glance at any of the standard texts on programmed learning or individualising instruction will show.

The first step is definition. The target audience must be clearly defined. It makes a difference if the audience consists of senior officers or seventeen-year-old recruits. The subject matter to be covered in the sequence must also be clearly defined. In a linear programme this would take the form of a student performance objective, but for a slide tape presentation it could be a more general aim.

After definition, an examination of how closely the material relates to the job must be made. This is the second step in which an analysis is made of the material which is to be presented, but if the aim or objective has been properly specified and clearly enunciated much of the analysis will have been done. It only remains to ensure that the instruction will be relevant to subsequent job performance requirements. Remember, material which involves movement may be best covered by a film or videotape.

The third step is to make a story board. This involves three things — writing the script, planning the visuals and relating the audio to the visual. Story boards may be formulated in several different ways. One way is to use small sheets of paper with words and visuals outlined. Kodak recommend the use of planning cards and television producers use prepared outline sheets. These formulations may be converted to or supplemented by a typed script. This should be clear and concise. As no visual should be projected for more than 30 seconds, unless it is highly detailed and requires a longer description, the script should be broken into short sequences of up to 25 seconds. The vocabulary used should be selected carefully. Technical terms with which the students may not be familiar should be defined and the language should be kept simple and the sentences short. To provide active student participation, students should be asked to answer questions or perform activities as often as possible. When recording, time must be allowed for these activities to be carried out.

The next step is to prepare the art work. Production of well planned visuals does not require an illustrator. There are many readily available items to assist the non-artist to produce attractive useful visuals, such as pictures, charts and diagrams. Careful chalkboard work can produce a good visual. There are many different ways of producing a very high standard of lettering such as the use of lettering guides or leterset.

The fifth step is photography. At this stage both prepared art work and direct photography of equipment or personalities, inside or outside is carried out. If possible the entire sequence should be photographed in one photographic session. Using the Kodak visual maker kit it is possible to photograph prepared art work, pictures from books and even photographs. Using the copy stand it is possible to photograph vertically or in three dimensions as well as the normal horizontal format. The camera can be detached from the copy stand for normal photography outside or inside using flash cubes. It is a very simple camera to operate and does not require a trained photographer. The copy stands are included in the kit. The normal type of film used in the camera is a colour transparency film which can be sent away for processing in a prepaid
The Audio Visual Sequence

Mailer. This is another advantage as the instructor receives his slides back, in colour, already mounted and ready for use, without having to use the unit darkroom. The cost of a kit is around $100 which is far less than a copy stand attachment for an inservice camera which also requires a trained photographer to operate it.

Recording is the sixth step and should not be attempted until after photography has been completed. The commentator should have a clear, fairly high pitched voice without a strong accent or any other speech peculiarity. It need not be recorded by a professional. American research indicates that for an instructional sequence, commentary added using the voice of a person that the trainee would normally expect to hear in that situation does not add to or detract from the effectiveness of the sequence (e.g. Drill-RSM or Current Affairs-Education Officer). Reading the script should be well rehearsed before recording and after recording the tape should be played back whilst the slides are projected to see if they mesh together. Several false starts can be expected. Background music and sound effects enhance the sequence. They can be recorded simultaneously or dubbed in later. Except in novelty or special effect recording, the background music should simply support the pictures. The best background is the one which goes unnoticed during the presentation. An instructor can record his commentary using the microphone supplied with the synchro recorder and background music can be recorded simultaneously by using a second tape recorder to play suitable music in the background.

One way to synchronise audio and visual is to use a cassette recorder with an in-built synchroniser. The smaller cassette recorders in general have advantages of size, weight and sophistication over the present 4-track reel to reel machines and the cassettes themselves are easier to use and store than reels. The built in synchroniser eliminates the need for another piece of equipment and simplifies the setting up of a synchronised slide sequence. The synchro-recorder is connected to an automatic slide projector via the remote control outlet and pulsing can be effected by pressing a button on the cassette recorder. In the playback operation slide changes are effected literally by an electronic thumb from the sound tape via the synchroniser and the remote control lead.

When the audio and visual parts of the sequence are completed, they should be previewed by the writer and by any other people with expertise in the subject matter. Any errors or weaknesses should be corrected. This is the seventh step. The eighth step is testing. The sequence should be tested on the type of student for whom it was prepared. Tests should be made carefully and objectively to locate any weaknesses in the sequence and to ensure that the sequence does achieve the objectives laid down in the definition stage. Testing should also include an analysis of the questions set in the sequence and a final test of the content of the sequence.

The ninth step is review. The results of the testing will probably indicate the need for changes. Be prepared to make extensive altera-
tions if these are indicated. It may even be necessary to go back and redefine the sequence. The preparation of instructors’ notes is the tenth and final step. As the author will probably not be the only user, instructors’ notes must be provided with each sequence. These notes should contain the following information — title, aim or objectives, duration, knowledge which the students are required to have before the sequence is shown and preparation required of the instructor. This includes the provision of stores and perhaps the preparation of problems to be used in the sequence. Any follow-up activities should also be included.

Existing stocks of film strips, or film strips purchased commercially, may be converted to audio visual sequences by cutting and mounting in slide mounts. Commentaries, either existing or formulated can be added. Another important source of very useful slides is the personal slide collections of individual soldiers, and many soldiers are prepared to loan these slides for instructional use. They can be incorporated into an instructors sequence and may save valuable preparation time.

In conclusion it may be noted that audio visual sequences are a very effective method of varying instructional presentations. One American researcher states that in certain instances automated instruction has accomplished the following:

- raised student end-of-course proficiency.
- provided instructors with an effective means of dealing with individual differences.
- imposed the attitudes of students towards learning the subject matter.
- made significant changes in the instructors’ job.
- in general reduced the time required to train a student to a satisfactory level of performance.

NOTES

1 Army Journal No. 258, November 1970. Captain A. Sandery — “Education or Training: Is that the question?”
Chaplain S. J. Hessey

When General Mola was besieging Madrid during the Spanish Civil War (1937-39) his Army consisted of four columns of troops outside the city. But he declared that his supporters within the city constituted a fifth column.

The Army should have a constant interest in all things likely to establish, maintain, or threaten its fundamental fitness. The ‘Enemy’ is seldom limited to the men and equipment of the opposing force. Like the defenders of Madrid we may have to contend with a fifth column, and like any Army at any point in history we may have to contend with a sixth column, the weakness within ourselves. It may be argued that our use of the substance Ethel Alcohol constitutes such a weakness. There now exists a small but highly informed group who understand in precise and scientific terms the nature and effect of this substance. Their findings suggest that it is no longer good enough to label all who question our drinking habits as “wowsers”.

This article seeks to draw attention to facts related to the use of Ethel Alcohol (Ethanol) and to encourage a wider recognition of its power among us.

Ethanol — The Substance

In its pure state a clear colourless liquid produced in the natural organic cycle by the action of Yeast + Sugar = CO₂ + C₂H₅OH.

Man first copied nature in contriving the process of fermentation to produce beverages with up to 16% Ethanol and then by distillation spirits with up to 96% Ethanol.

Pharmacologically Ethanol is classified as an anaesthetic and thus its main action is on the brain and central nervous system producing a progressive descending repression. In other words it puts us to sleep. Ethanol belongs to those substances classified as Drugs — (i.e. “a substance which when taken into the body causes changes in thinking, feeling and behaviour”). Ethanol use is therefore part of our Drug Use and the problems of its abuse a part of the general problem of Drug misuse in our Society. Ethanol is a Drug of Addiction (= “compulsive repeated use resulting in harm to the user and those about him”).

Between 5% and 10% of our population are alcoholics (= Ethanol dependants) a much larger number suffer from “Grog Strife”. This can occur in any or all areas of life — domestic, social, legal, health or employment.

Ethanol in the System

Unlike food, which must be digested, Ethanol is absorbed directly and rapidly into the bloodstream. Unlike food, which the body needs, Ethanol is automatically eliminated. The C₂H₅OH molecule is very small compared to other Drugs and this aids its absorption. Elimination occurs in small quantities via the breath, perspiration and the kidneys. Mostly (90%) it has to be ‘oxidised’ by the liver. This occurs at a fixed rate. For the average man this works out at about 10g per hour.

Remarkably, civilised man pours his drinks in standard measures related to the % of Ethanol in the beverage. A standard 10 oz. beer, 4 oz. table wine, 2 oz. Port, or 10 oz. of spirits all contain just on 10g of Ethanol.
we drink at the rate of one standard measure drink per hour we allow the body to eliminate Ethanol as fast as we absorb it.

Increasing the intake beyond our capacity to eliminate causes an excess in the blood alcohol level. This excess must circulate in the bloodstream and thus through the brain until it is eliminated.

These measurements are related to the 'average' man. In practice the effect of Ethanol varies from person to person and even from place to place and time to time. But the fact remains that the figures for the average man give us a yardstick by which to talk intelligently about the effects. Tolerance to this drug, food in the stomach, atmosphere, body weight and other facts notwithstanding, each of us has a body capacity to eliminate Ethanol (repeat for the average 10g per hour) and it is this ability which has to cope with our intake.

**Ethanol in Our Society**

Western man uses Ethanol as a social drug. It is readily available and socially acceptable. It appears at most social gatherings, it is found in most homes, and it is used in the central sacramental act of Western Religion.

It is one of our oldest drugs and we use it to relieve our tensions and frustrations, to lubricate our social intercourse, to promote our relaxation, enhance our food and quench our thirst. When it achieves these objects it probably does us and our society much good. On the other hand it is perhaps unfortunately too much associated with the process of reaching maturity. Doing it, in fact overdoing it, is equated with masculinity. But sooner or later we come up against the facts.

Take these for starters—

- Hospital admissions — 1 in every 5 beds.
- Mental institutions — 1 in every 4 admissions.
- Prison admissions — ⅓ of all violent crime.
- Road deaths — 1 in every 2.
- Marriage disruption — 2 in every 5 divorces and judicial separations.
- Suicides — 1 in 3.
- Industry — largest single cause of lost manhours and accidents.
- Health — the nation's No. 1 health problem.

Those of us in the helping/healing professions have known for years the importance of recognising such facts. At last the scientific analysis of Ethanol and its physical and social effects is bringing the true picture into sharper definition. The result is probably worse than we feared.

**Consumption Figures**

Australian intake of Ethanol has been rising rapidly for decades. In the period between the outbreak of the Second World War and now, we have increased our intake by three times. If this tendency continues we can forget about continental defence or any other kind of defence. Newspaper sensationalism aside (and we have enough of that) the fact is that the way we are using Ethanol makes it a very real candidate for the position of public enemy No. 1. We can tut, tut, about Pot and narcotics and the decline of young Australia from now till kingdom come, but if we refuse to face the problem of Ethanol we may be wasting our time.

**Normal Use and Overuse**

Awareness of the Ethanol problem must raise questions — "What is safe use?", "How much is too much?" There are two basic guidelines:

- For the Alcoholic: Alcoholism is a chronic relapsing illness which has many causes and occurs in specially susceptible people. For such any use of Ethanol is dangerous.
- Other Users. The following have been established by the World Health Organisation:

  - More than 80g of Ethanol daily — Risk of Strife.
  - More than 120g of Ethanol daily — Certain tissue damage.\(^5\)

Approx. 10% of drinkers are hazardous users. Normal use for most drinkers lies between nil use to 80g of Ethanol or 8 standard measure drinks on a regular basis.

**The Industrial Problem**

"The Employer who says that he has no alcoholism problem does not know his employees."\(^6\)

"Australian Industry loses one billion dollars a year from alcohol."\(^7\) Apart from humani-
tarian considerations there are sound economic reasons for industrial leaders to recognise and support tested programmes of education and recovery. Today many industries are facing the problem on the assurance that it can be detected and treated. There are strong indications that Industry could provide one of the key elements in a reversal of our present trends.

**The Defence Industry**

As an employer of a sizeable slice of the national manpower we may regard the Armed Forces as an Industry. Like other industries we must be adversely affected by “Grog Strife”. Ours is among the occupations listed as ‘at risk’. Consider some aspects of our industrial tradition — the ‘Mess’ system, the number of alcohol sales points, lower prices, compulsory attendance, and Peer Group Pressure.

For officers and sergeants much of this relates to traditions deeply embedded in the customs of the Service, the requirements of Mess life and the alleged connection of such with ‘Esprit de Corps’. For the ordinary digger, especially in the first months of Army life, it may perhaps be more related to our failure to provide and educate him with anything better to do with his ‘off duty’ time. This at least is a part of the problem that we share with the whole of our society.

“There is nothing else to do” is a constant cry from the young soldier, a little lost in his new world and often very very lonely.

**One of the Good Things in Life**

I think it was Dr Moon that I first heard use this term, “one of the good things in life”, and that is how I personally, as a user of Ethanol, want to view it.

A social drug may have a place in helping us to cope with the problems of life and with one another. But the advantage of such use must be weighed against the adverse effects. Ethanol use is protected in many ways: By its long historical connection with our culture; by its place in our social and economic structures; by the very fact that most of us are users and tend to defend our habit. In the Armed Services this protection may go even deeper.

This article questions our protection of the use of Ethanol. On the basis of fact it would appear to constitute a large part of the 6th Column which strikes at the heart of that very fitness and preparedness which is otherwise proclaimed.

N.B. The Author wishes to acknowledge the kindness and assistance of Dr Pat O’Neill and his team in the ‘Hunter Regional Community Addiction Service’, and to the over 10,000 Recruits and Infantry Corps Trainees whose questions sent me in search of the truth.

**NOTES**

1 A term used to describe any trouble related to Ethanol use.
2 Dr Everingham — when Minister of Health.
3 Drew, Moon & Buchanan, *Alcoholism in Industry*.
4 ibid.
6 Dr Moon, an acknowledged authority on Alcoholism in industry, at a Seminar at the University of Newcastle.
Clausewitz
Absolute War
and a
Politico-Military Communications Gap

Captain M. I. Carr
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Introduction

TAKEN in its broadest aspect war can possibly be seen as a result of the nature of man, the nature of the state in which man exists or the nature of relations between states — or any combination of the three. The concept of war, however, varies widely amongst them. If we presume that man is the arbiter of his destiny then war can be seen as a man-made phenomenon. It is a common peculiarity of man-made phenomena that, unlike natural phenomena, they can be influenced by what is thought or said about them. Clausewitz, despite his refusal to put a ‘clumsy pedantic’ definition to war did describe it more fully than perhaps any other man and enunciated a philosophy which has maintained coherence, even to the nuclear age.

Clausewitz’s method of describing war centred on his use of the concept of absolute war, (or a war in abstract) as a dialectic forum for argument. Using that concept he was able to describe a perfect situation of war. He then, however, set about reducing the perfect situation to a digestible and pragmatic reality; this reality was his message. Clausewitz argued that man was not a plaything of fate and any act of war was the result of man’s actions at the highest levels of society i.e. the political control of a nation state. He was expressly concerned about what might be called, in modern terms, the existence of a politico-military communications gap; the implication of which is a two way exchange of information which has broken down. Clausewitz expressed the necessity for communication in most positive terms. Although only a small portion of his work it forms the base upon which the rest was founded. His ideas in this field certainly retain their relevance and appear of major importance to any nation whose primary concern appears to be a purely conventional method of defence.

Background

Before discussing Clausewitz’s work it is necessary to have some understanding of the events of his time which influenced his thought. Clausewitz lived through the French revolution and the Napoleonic wars and made a study of Napoleon and his methods. From this he learnt one great lesson: the universal currency of politics is power and power resides in the ability to wreak physical destruction. The most obvious and immediate lesson of the Napoleonic wars was that previous conceptions of war, in terms of defined strategy, were obsolete. The limited war concepts of the monarchical systems and their traditional methods were found wanting in face of the tremendous offensive impact and nationalistic fervour of Napoleon’s forces.

Clausewitz devoted most of the period between 1818 and 1830 to writing his life’s work On War, but died before he could finish it. Apart from the inexhaustible material and the scope of the field which Clausewitz tried to cover his main difficulty lay in the nature of his concept of war. “He did not believe that the nature of war was such that any abstract theory could ever succeed in explaining its manifold and complex phenomena.”

In order that he might better succeed in explaining his thought Clausewitz became a philosopher of war and his explanations are couched in both abstract and real terms. This
dialectic has, at times, resulted in confusion, and at other times in deliberate misrepresentation. At first appearance his emphatic generalization tends to strike to the core of his subject. Yet further reading lays open a series of qualifications that drastically change his emphasis and meaning.

There have also been varying interpretations placed on his work by competent critics and their divergence of opinion has not helped to clear the confusion. Ritter, for example, says "... his true originality does not lie in the doctrine that today comes at once to mind — the phrase about the higher unity of politics and war. In essence he took this over from the technical military literature of his time. His real discovery is the concept of absolute war." Fuller, however, writes that "... because of Napoleon's offensive principle, he foisted on to him his absolute concept . . . On the other hand his penetrating analysis of the relationship of war and policy has never been excelled . . . " It is divergence of opinion of this kind which makes a proper assessment of Clausewitz's philosophy difficult. It is apparent, however, that his significant philosophical contribution occurs at a very high level of analysis and concerns the fundamental nature of war and its significance for man and his activities.

The only section of his book On War which Clausewitz felt to be in its final form was Book 1 Chapter 1 and it is in these passages that the underlying message of the book is most clearly expressed. What Clausewitz succeeded in doing was to analyse the new concepts of war which had been introduced by the French Revolution and which had already been utilized and changed by Napoleon. His philosophy of war flows from this analysis. Napoleon's actions had provided a revolutionary antithesis to the concepts of war which the monarchical powers regarded as strategic and tactical wisdom. Clausewitz, in analysing Napoleon's actions synthesized the military events of his time. The legitimate monarchical powers were the status quo operators of the time and were confronted with a style of revolutionary peoples' war which they were unable to combat. It was part of Clausewitz's aim to redefine this new type of war so that the legitimate powers might also benefit from its brilliant, spontaneous originality. He wanted them to understand Napoleon's success in terms of the political reality of a unified nation state.

Clausewitz often commences his analysis saying in some ways the opposite of what he concludes with, following a pattern of thesis, antithesis and synthesis. He demonstrates this trait in the first chapter where he insists that the use of force is theoretically without limits and then goes on to explain why it must in fact be limited. He develops the theory that extremes exist in the abstract world of ideas, which bears little relation to reality, and consequently he writes of war in terms of abstraction but qualifies his arguments from reality. An unfortunate result of his method has been that some people interpret his writings without taking notice of the qualifications. Consequently Clausewitz's abstractions have often been taken as his gospel rather than as philosophical idealism, while the qualifications of reality have been ignored. Clausewitz does however stress that the abstract nature of things must remain as the point of direction from which reality is to be observed and understood.

The concept of absolute war, for which he has been both praised and vilified, Clausewitz developed from Napoleon. Napoleon's antithesis of the monarchical generals' reluctance to fight battles was achieved by the transference of the ruthlessness of the civil war to the external enemy, and "... once ignited, hatred of this intensity is appeased only by total triumph, when the foe is utterly humiliated or destroyed, or when one's own side is completely exhausted." Clausewitz writes that "... we might doubt whether our notion of its absolute nature had any reality, if we had not seen real warfare make its appearance in this absolute completeness right in our own times . . . the ruthless Bonaparte quickly brought it to this point."

However, he qualifies this statement in the same chapter when he says that, "... war originates and takes its form not from a final adjustment of all the innumerable relations which it affects; but from some among them which happen to predominate, then it follows . . . that it rests upon a play of possibilities, probabilities, good fortune and bad." Clausewitz took the act of war directed upon the enemy's power of resistance as the basis
for his analysis; he had observed that Napoleon fought his wars and won them in this way. As Liddell Hart has written "if the term absolute war has any meaning it is that of a fight until the capacity of one side for further resistance is exhausted." Consequently absolute war — or war in abstract — ought to end in the complete victory of one side over the other and furthermore any moderation in war is an absurdity since failure to utilize all the forces at one's disposal defeats the purpose of war. It is interesting to note that Clausewitz, on his first page, separates the proper political object from the aim of military action "... as something not belonging to war itself" and he is thus able to postulate that war in its ideal form is the application of unlimited physical force (given the separation of war from its political object). The two are rejoined in his concept that ideal war is only theory and not reality. Clausewitz realized that in practice war is never an isolated act and force is not an end in itself: he writes that "The probabilities of real life take the place of the extreme and absolute demanded by theory." He goes on to say "if the extreme is no longer shunned and no longer sought, it is left to the judgement to determine the limits of effort, and this can only be done by deduction according to the 'laws of probability' from the data supplied by the phenomena of the real world." Thus force is not an end in itself and can only be justified when rationally employed for public purposes. The abstract concept of absolute war can be construed as the negation of statesmanship: war as an act of violence pushed to its utmost bounds neglects the ends of policy.

**War, A Rational Political Instrument?**

Ritter writes that Clausewitz was assailed by doubts as to the historical reality of his theory of absolute war and denied that the ideal could ever become the goal of political action. Clausewitz demonstrates this in Part VI of Chapter 1 where he writes:

"Everything assumes a different shape if we pass from the abstract world to that of reality. In the former . . . we had to conceive both one side and the other as not merely striving toward perfection but also attaining it." Clausewitz, however, says perfection would be attainable if war were a wholly isolated act which arose quite suddenly and had no connection with the previous course of events — if, that is, it consisted of a single decision or of several simultaneous decisions or if its decision were complete in itself and the ensuing political situation were not already being taken into account and reacting upon it. That these reasons are themselves abstractions shows quite clearly that Clausewitz saw the limitations reality placed on the abstract ideal. Through his dialectic Clausewitz presumes his apparent contradiction to be a self evident explanation. The contradiction is exemplified in his ridicule for the idea that there is a way of overcoming the enemy without great bloodshed, thus implying that war is an act of annihilation continued until total victory is achieved. The possibility that such action may bankrupt the state is the negation of policy since policy should be directed not only to victory but the ensuing peace (where peace is an absence of war). Clausewitz assumes the understanding of that concept in his principles of idea and reality where reality takes into account probability and his idea is not a "condition necessary for peace." Clausewitz then avoids the attempt to define war; instead he relies on confining himself to its 'essence' and so states that "war is . . . an act of force to compel our adversary to do our will." The essence of war is divided into a means of imposing will, that is force, and an object, which is the aim of that imposition. Clausewitz further clarifies this when he writes, "to achieve this object with certainty we must disarm the enemy, and this disarming is by definition the proper aim of military action." Thus disarming the enemy may push aside the object as something not rightly a part of the action of war. His concern was to delineate the military action of war which is by no means the whole. The capitulation of the armed forces has come to be seen as an end of war when in fact it is only a means to an end. The real end is the political capitulation of the enemy government and it is upon this aspect that Clausewitz bases his theory of military action. Capitulation of armed forces is
thus only an end of military action and may occur before or after the capitulation of the government.

Clausewitz’s view of war was that it should be a rational instrument of national policy and the three words rational, instrument and national are the key concepts of his paradigm. They imply what war ought to be: war ought to be a rational decision: war ought to be instrumental in achieving what should be a national goal. This centred upon one of his main points, that absolute war, a war in the abstract, an ideal situation not related to reality, is an ‘ought to be’ and not an ‘is’. Clausewitz’s greatest achievement was perhaps his creation of the awareness that war was an offshoot of national policy; he created this awareness on two levels — war as a political expression and war involving the whole nation.

The Communication Requirement

Given that political theories can be descriptive or prescriptive, where the former describe actual occurrences and the latter specify means by which certain goals may be achieved, Clausewitz can be seen to develop his theory along prescriptive lines. He does not see war for war’s sake but as a political-military combination in which each justifies the other in the context of war. War to Clausewitz thus has a dual nature. It is an autonomous science with its own method and objective and yet at the same time a subordinate science in that its ultimate purpose is external. Clausewitz states that

“The war of a community of whole nations and particularly of civilized nations always arises from a political condition and is called forth by a political motive. It is therefore, a political act.”

He qualifies this, however, by saying that:

“... the political object is not on that account a despotic lawgiver, it must adapt itself to the nature of the means at its disposal and is often thereby completely changed, but it must always be the first thing to be considered.”

His famous dictum that:

“... war is not merely a political act but a real political instrument, a continuation of political intercourse, a carrying out of the same by other means.”

rests on the assumption that the political design is the object and war is the means and the means can never be thought of apart from the object.

Clausewitz is emphatic and repetitious in his method of expressing the prescriptive political theory. Having defined war as a political instrument he instructs the reader how it can be used in the pursuit of certain objects. Ritter suggests as the reason for his repetition a “... profound concern to wrest discussion of the problem of war from the hands of the military experts ... The tacticians of traditional combat doctrine. The bitterest experience of his life had been to watch the miserable failure ... of this narrow specialised academic (sic) knowledge, totally lacking in the over-all view of the political situation.” The crucial errors at Jena and Auerstadt had been made in the political rather than the military and strategic sphere and there was no real understanding of the character of the new style of warfare. Clausewitz, by synthesizing the new spirit in politics and war that had erupted in the Revolution, was stating that political action had to achieve a degree of knowledge of military expertise that was previously unthought of. “Instead of assigning to politics a more subservient role in war Clausewitz emphatically asserts its primacy: it is politics that begets war. Politics represents the intelligence, war merely its instrument. The only possible course is the subordination of the military viewpoint to the political.” Again he qualifies this assertion by writing that it all rests upon the assumption that the political arm knows the instrument it is going to use. Given this knowledge then

“... it is entirely its affair to determine what events and what direction of events correspond to the aim of war.”

Political Decisions and Military Capacity

Clausewitz postulated that war has its own language but not its own logic. By language he refers to the means or methods of conducting war and his logic relates to the purpose for which the language is adopted. It can be seen that Clausewitz was arguing that politicians should understand that they share the essential responsibility for the success or failure of war. To this extent Clausewitz must be seen as viewing war as a man-made phenomenon and the political act of choice of war as an objective principle designed to confer maximum advantage.
Further qualifications follow in a quantitative sense when Clausewitz writes that "it is true the political element does not penetrate deeply into the details of war. Vedettes are not planted, patrols are not sent round as political considerations. But its influence is all the more decisive in regard to the plan of a whole war, or campaign, and often even for a battle."\textsuperscript{35}

The quality of the politico-military relationship is, however, a little harder to qualify. Logically the means of war should be geared to the object but psychologically it can be computed backwards, that is, the political objectives are determined by military capacity.\textsuperscript{25} This leads back to the point that the political arm must have a full and detailed knowledge of the instrument it intends to use and must ensure that the instrument is capable of carrying out a given political direction. The act of choice of war as a political decision therefore rests firmly upon the objective fact of military capacity. The act of choice becomes not only a moral and political decision but one that affects the whole nation as military capacity is reliant upon the whole economic and manpower capacity of the nation.

Similarly, Clausewitz qualifies his absolute principle of utmost force by the admission that the political object, "as the original motive of the war, should be the standard for determining both the aim of the military force and also the amount of effort to be made."\textsuperscript{36}

The matching of military to political aims marked the fundamental distinction between absolute and real war. Clausewitz stresses: "As war is no act of blind passion but is dominated by the political object, the value of that object therefore determines the measure of the sacrifice by which it is to be purchased."\textsuperscript{37}

Clausewitz did not believe that the complex structure of war could be explained by abstract theory. He insists that the fundamentals of war are subject to "... an infinite number of historical, psychological, moral and incidental modifications."\textsuperscript{38}

However, he did believe that the reality of war should be viewed from the abstract point of view in order that the reality be more clearly understood.

**Conclusion**

Clausewitz's lessons not only retain their currency in a wartime politico-military relationship, but also in the modern peacetime triumvirate of which the bureaucracy is a member. Clausewitz considered that knowledge of aims, objectives and abilities was an essential prerequisite for conflict and his penetrating enunciation of responsibilities in the first and final chapters of *On War* can easily be translated to the present. Yet just as easily, the simplicity of his message can be, and in some cases has been, lost in the tangle of technology which accompanies modern man. The message does, however, have relevance to the technological age and can be adapted to it. It must not be seen to be subsumed through a lack of understanding of the modern accoutrements of defence and warfare; an understanding and knowledge which must be made available at all levels of the modern defence organization. If defence is to be a practical undertaking where effort can be seen to be worth the sacrifice then knowledge of aims, objectives and abilities must be coldly and realistically appraised.

**Notes**

2. ibid., p. 21.
10. ibid., p. 571.
12. Clausewitz, op. cit., p. 3.
13. ibid., p. 9.
14. ibid.
18. ibid., p. 20.
19. ibid., p. 3.
20. ibid.
22. ibid., p. 48.

Reviewed by Professor B. D. Beddie University of NSW, RMC Duntroon

This, the first volume of Dr Meaney's two volume work, bears the sub-title: The Search for Security in the Pacific, 1901-14. It is distinguished in two ways: it is the first full scale diplomatic history of the Commonwealth in this period and it is a sustained piece of research of very high quality. A glance at the "Select Bibliography" (pp. 285-296) will quickly bring home to the reader the wealth of sources that confronted Meaney in undertaking this study. A close reading of the text of his book reveals a mastery of these highly diffuse and often badly organized sources which calls for unqualified admiration.

Meaney is able to bring coherence and sharpness to the mass of his materials because he has a distinctive thesis to propound. His thesis is that the leaders of the Commonwealth in its first two decades succeeded in fashioning "a defence and foreign policy which possessed its own inner coherence and logic" and which required "[s]etting aside the strategic appreciations of the prestigious British authorities, the Colonial Defence Committee, the Committee of Imperial Defence, the Admiralty and the War Office". This achievement was the greater because it was carried through by Governments which made no claim to full sovereignty in foreign affairs and defence, which possessed no diplomatic service and no true foreign office and which, with rare and partial exceptions, lacked able and independent-minded military advisers. (Captain W. R. Cresswell, as he was in this period, emerges as at least a partial exception). Like previous writers, Meaney admits that imperial sentiment (loyalty to the Empire, pride in the British race) as opposed to Australian nationalism was dominant in the Commonwealth at this time. Unlike many of his predecessors, however, he denies that the dominance of imperial sentiment deprived Australians of the sense of a distinctive national interest to be realized within (and indeed, by means of membership of) the Empire. He concedes that in the years 1901 to 1905 there was a lack of clarity in the definition of Australia's national interests and a failure to develop a coherent defence policy. But, after the defeat of Russia by Japan and under the leadership, above all, of Deakin, Australian Governments became fully seized of the frailty of British power in the Pacific. In these circumstances they strove unremittingly (though unsuccessfully) to obtain significantly increased commitments of British naval power to the Pacific. At the same time they acted successfully greatly to augment Australia's own military and naval forces. Though Deakin stands head and shoulders above all others in the development of an independent
Australian policy within the framework of the Empire, Fisher, Hughes and Cook are each represented as adept in carrying forward Deakin's essential policies. Among unofficial leaders Frederick Eggleston emerges as the most perceptive and persuasive advocate of an independent outlook in foreign policy and defence.

Readers of this journal may find of special interest Meaney's quite detailed discussion of certain aspects of military and naval affairs. The thoroughness that he brings to all aspects of his research is, for example, shown in his treatment of Major-General Sir Edward Hutton, the first General Officer Commanding the Australian military forces. No previously published account of the activities of Hutton under the Commonwealth Government can in any way rival that provided by Meaney. While giving full recognition to the qualities in Hutton that have been so praised by other writers, Meaney also insists (and rightly so) that he was arrogant, underhand and sometimes tactless and lacking in political sense. Meaney also shows (for the first time so far as I am aware) that Hutton greatly influenced Bridges and Brudenell White both of whom continued to offer advice based on Hutton's principles, though they were politically unacceptable, long after the latter had returned to England. On the naval side, Meaney treats in detail the negotiations leading to the establishment of the R.A.N. and the bitter controversies that took place when the Admiralty, in the eyes of the Australian Government and, indeed, of the Colonial Office, unilaterally abrogated the 1909 Agreement.

Readers of this volume will certainly look forward with impatience and, indeed, excitement to the appearance of its successor. They may also hope that Dr Meaney, having made himself pre-eminent in the field, will not leave the story at 1923 but will carry it forward at least to the Second World War.

The text of the book is not wholly free of minor errors and something quite serious has gone wrong on page 214. A negative seems to be lacking on page 237. Finally lest praise should seem to run unbounded, Dr Meaney regularly writes 'try and' when he means 'try to'.


Reviewed by R. E. Wright, Defence Central, Canberra.

DURING the decade to 1805 which is covered by this book, John Jervis and Horatio Nelson evolved the fleet and tactics which enabled the great British naval victory at Trafalgar. Although other important actions such as St Vincent, the Nile, Copenhagen and Algeciras were fought during this period, only relatively short descriptions are given of them. Rather, the book is primarily concerned with the Captains who ranked among Nelson's "Band of Brothers", that group of men described as probably the most talented ever to have served in the Royal Navy.

Nelson's Captains are skilfully introduced into the chronological narrative. Their background and personalities are given in varying degrees of detail as some left or were the subject of more detailed records. The availability of one particular primary source, the diaries of Betsy Wynne, results in rather lengthy accounts about the ability of Captains Fremantle and Foley as suitors. In this respect we are left mercifully ignorant about the rest of the "Band of Brothers".

More importantly, from the other available records, Ludovic Kennedy records that most of Nelson's captains came from middle class country families being "simple, decent men, direct in speech and manner, reasonably well educated but with no intellectual pretensions; they had a high sense of morality and honour and an appreciation . . . of the wider events in which they were taking part."

While valid as a generalisation, this description obscures their individual qualities which usually served Nelson well, and which Kennedy records where appropriate. The most striking of these is the initiative shown by Foley in getting between the French line and the shore at the Battle of the Nile. Followed by four British ships, he found as he had expected that the French were unprepared for battle on their inner side. Nelson then placed the remainder of his fleet on the outside, effecting a withering crossfire which destroyed the van of the French line in two hours vigorous fighting. However,
as is only to be expected, not all of Nelson’s relations with his Captains went smoothly. Simple misunderstandings caused most of his difficulties with men such as Samaurez, Troubridge and Ball.

Well written and readable, the book is recommended to those wanting to know more about the men who won some of the Royal Navy’s greatest victories, rather than about the victories themselves.


This book consists of a series of papers presented at a conference on historical research relating to World War II held at Washington in June 1971. Nearly all the contributions are by American historians, but Henri Michel provides a comprehensive study of documents relating to the French Resistance while Noel Frankland analyses British archival policy with his usual clarity and skill.

Although the papers differ sharply in quality and interest, the book is a valuable guide to American sources. The most readable contribution is by Barbara Tuchman, whose wit and humour in discussing the problems she faced when writing her biography of General Stilwell make a refreshing contrast to the heavy pedantry of the official historians. She comments sardonically on “the fairy tale of the Chinese war effort” and on the attempts by American propagandists to present it in a favourable light in the United States. She says that “communiques have about as much relation to what actually happens as astrology has to the real science of the stars”. It is also gratifying to find an historian who has the confidence to criticise Michael Howard’s much praised but rather tedious history of the Franco-Prussian War.

While the papers are concerned primarily with research problems and the accessibility of documents, some significant points emerge. Russell Fifield in his paper on American policy towards Indo-China remarks that in November 1943 and June 1944 Roosevelt offered the French colony to Chiang K’ai-shek. Failing to persuade the Generalissimo (who had enough problems of his own), he sought to put Indo-China under an international commission composed of American, British and Chinese representatives. The proposal was dropped by Truman, who did not share his predecessor’s hostility to France. Indeed when the Japanese attacked and massacred the French troops in Indo-China in March 1945, Roosevelt refused at first to allow the U.S. air force units in China to give any assistance to the French. De Gaulle’s reactions need no elaboration.

Australian scholars will be indebted to Clayton James for his comprehensive assessment of documents and private papers relating to General MacArthur. Although the material is so copious that no individual scholar can hope to examine all the relevant sources, yet there is a curious lack of information about the Clark Field disaster in December 1941 or the Bataan campaign of 1942. James says of some documentary collections relating to MacArthur that “there have been obvious deletions of papers which could convict him of less than perfection”. He makes the comment: “If only the documents are examined, MacArthur appears with few exceptions, to be composing paeans of praise to the Australians serving under him; his real opinion may be better judged by the way he used their services”.

This volume illustrates very clearly how interpretations of World War II are changing in the light of later research and more mature evaluation. This is particularly evident in Louis Morton’s excellent paper “Prologue to Pearl Harbor”, which not only examines the extensive and highly controversial American writing in that field but also refers to important research by Japanese historians. In the light of the information now available, Roosevelt’s emotive phrase, “A Day of Infamy”, can be safely consigned to the dustbin of History.


In an essay entitled Haig, Winston Churchill said: “One can see . . . the strength of will and character which enabled him to withstand
the various intense stresses to which he was subjected. With his front crumbling under the greatest of German assaults, or with his own army collapsing in the mud and blood of Passchendaele, with an Ally always exacting and frequently irregular, with the Government at home searching high and low for someone to replace him, he preserved at all times a majestic calm. He lived each day without departing from his convictions, or seeking sensational effects, or, courting popularity, or losing heart. He was equally sure of his professional qualifications and of his constitutional duty; and he acted at all times in strict accordance with these definite conceptions.” These words depict in a nutshell the character of Lord Haig (1861-1928) and they illustrate the conditions under which he discharged his duties as C-in-C of the British Armies in France.

As a writer on the subject of higher command, its methods and its problems, the author, Major-General Sixsmith, is already well known. This work, Douglas Haig, should not disappoint his earlier readers. It covers Haig’s life from birth till death. But the major part of it examines his career in the war of 1914-18 — at first as a subordinate commander of Field-Marshal French and then, from December 1915 until after the Armistice in 1918, as French’s successor in the post of C-in-C of the British Armies in France.

When war came in 1914, Haig had hitherto met all the requirements of a good officer since he had passed out of Sandhurst first and with the Anson Memorial Sword. He was commissioned in the 7th Hussars in 1885. He had commanded a squadron and later a regiment in action. He attended the Staff College in 1896-7 where he distinguished himself not because of any intellectual superiority but because of his dominant personality. It made itself felt in every company — in the field, on the polo ground and in the mess. Haig had also served with distinction before 1914 in higher command and staff appointments at home and in India.

Not even Oxford endowed him with intellectual curiosity and unlike his distinguished contemporary, Allenby, he had no interests outside the Army, except polo. His education was, therefore, narrow and specialised and, unlike Monash, he did not pursue knowledge for its own sake. Like Wellington, however, he spoke French with ease and skill and this accomplishment was an advantage to him in his dealings with French politicians and soldiers.

Although Haig wrote with skill and clarity, as his famous “Backs to the Wall” order of April 1918 illustrated, he was almost inarticulate, like Wavell, when it came to presenting an argument or defending a case orally. He cared for his troops. But discipline was paramount with him — he insisted on obedience to orders and the will to fight.

The question, “Was Haig the best officer available to command the British Armies in France?”, is an eternal one; and so it must forever remain incapable of a final answer.

This book, interestingly illustrated with maps and pictures, is an important contribution to the literature on Lord Haig. The author has packed much into a small compass and he has presented his case critically and judiciously.


Reviewed by Major D. H. Ivison, UK Exchange Officer, Army Office, Canberra.

So many books have been written about Dunkirk and the evacuation of the defeated British Expeditionary Force in May and June 1940, that it is difficult to imagine what more there is to say. Robert Jackson’s book does not pretend to be for military historians, but is aimed rather at a more general audience. While analysing the day to day retreat of the BEF to Dunkirk, Mr Jackson introduces many personal experiences and anecdotes from soldiers involved in the withdrawal.

It is a story not only of British troops fighting a lost campaign, but of French soldiers too, whose heroism and self-sacrifice made the deliverance of Dunkirk possible. This is a fact quite often forgotten. Without the steadfast stand of the French troops holding the defence perimeter, it would not have been possible for the 180,982 Allied troops to escape,
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albeit minus much of their heavy weapons and equipment, to fight another day.

Although the bulk of troops rescued were British Army, the part played by the naval and air forces is also well covered in this book. It is sobering to read that during the evacuation some 226 ships were sunk, and 171 Allied aircraft destroyed.

The book is written in a very readable style and is well illustrated with clear and understandable maps.

* These books obtainable in Australia through Hodder and Stoughton (Australia) Pty. Ltd.


Reviewed by Major C. Winter
Army Office, Canberra.

In this volume the authors have produced a study of military leaders who have shaped the course of war from the Turkish conquest of the Byzantine Empire in 1453 to the Yom Kippur War in 1973. Apart from the number of American generals included, a balanced and representative selection has been achieved. If, as Napoleon claimed, there have been only seven great commanders in history, then it must be concluded that any selection is arbitrary. This selection of military leaders, covering a period of five hundred years and arranged alphabetically in three hundred and fifty pages, provides valuable reference material. It will also be found to bridge the gap to some extent between general political history and military history, important aspects of which are regrettably ignored by some historians. The volume is very handsomely produced on good quality paper and is abundantly illustrated in colour and monochrome. It is completed with a useful, but limited, glossary of terms and a series of maps showing the main theatres of war.

The first entry is Abbas the Persian Shah and conqueror who died in 1629; the last entry is the Russian Marshal Zhukov, Russia’s leading soldier in the Second World War. Between these two entries, military leaders as diverse as William the Silent and Mao-Tse-tung, Cromwell and Che Guevara, and King George II of England and Dayan, are linked over the centuries by membership of the profession of Arms. Other entries relate the achievements of people like Thomas Cochrane, the eccentric British admiral who planned to overwhelm Sebastopol and Crondstadt in the Crimean War by using sulphur gas — an anticipation of poison gas warfare; of Schlieffen, ‘the epitome of the pure staff officer’ and author of the Schlieffen Plan. Appropriately, brief mention is made of Jean Henri Dunant, the founder of the Red Cross movement and recipient in 1901 of the first Nobel Peace Prize.

Some information complements very well the more general history of a period. For example, the Prussian soldier, Steuben, in the service of the United States. He was the drillmaster of Washington’s Continental Army, and ‘It was thanks to Steuben’s tireless efforts that American troops were able to match the professional skills of British regulars in the later battles of the war’.

The authors have developed to a high degree the ability to encapsulate the qualities, achievements and background of a military leader within a coherent, comprehensive and brief article. The entries on William the Silent, Cromwell, Frederick the Great and Napoleon are particularly good examples of this.

Two predominant thoughts emerge from reading about these military leaders paraded so effectively before our view: firstly, the importance of winning: success covers a multitude of shortcomings. Secondly, in an age increasingly dominated by sophisticated weaponry this book is a timely reminder, if such be needed, that basically it is soldiers who wage war, whether it is in the fifteenth century or the twentieth century.

The familiar names of the military leaders of the nineteenth and twentieth centuries are well represented and well portrayed, as would be expected. However, Australian readers in particular will be disappointed that no Australian general is included.

The authors make the claim that ‘in an age of global conflict, guerilla war, ultimate deter­rents and the obscenities of destruction pro-
duced by modern technology, the study of war is once more respectable*. With this renewed respectability in mind WHO'S WHO IN MILITARY HISTORY is strongly recommended as a valuable reference book which brings into sharp focus military leaders who have shaped the course of war.


Reviewed by John Robertson
History Department
Faculty of Military Studies,
University of New South Wales,
Duntroon.

COLONEL Hall’s autobiography describes an interesting, active and varied life. He spent his boyhood in northern Victoria and joined the AIF in August 1914, before he turned twenty. Two-thirds of the book deals with his experiences in the Great War. Later chapters cover his travels, to attend the coronation of George VI in 1937, and to Europe again in 1974; recount his work in World War II; and describe his activities with Legacy.

For readers of the Defence Force Journal by far the most significant part of Colonel Hall’s book is his account of his years in the First AIF. He sailed from Melbourne in October 1914 as a corporal in the 1st Light Horse Field Ambulance. By the middle of May he was working in an operating theatre in a ship which was taking wounded from the Gallipoli Peninsula. Later he spent some time on shore. He is quite restrained in writing of the horrifying sights he saw.

A few months after the evacuation from Gallipoli he ceased to be a non-combatant and became committed to the less noble aim of the destruction of human life*. As a 2nd Lieutenant he was seconded to the Imperial Camel Corps. After a few months training as a camelman, Hall was in action in December 1916 near El Arish, an episode in the Allied advance through Sinai and Palestine against the Turks. There follow excerpts from Hall’s diary giving accounts of some of the main battles — such as Gaza, Beersheba — and relating other incidents as the Allied force made its slow progress north. He transferred to the Light Horse and was with the 5th Light Horse Brigade at the capture of Damascus in September 1918. Then it was peace, and a pleasant few months in Syria and England before his return home in 1919.

Hall was not at the Western Front and did not see a great deal of the fighting on Gallipoli. This helps to explain why his experience of the war reads like a great and reasonably enjoyable adventure. Unlike other participants’ memoirs, this book says little of the horrors of war. It is a straightforward account of a young man unquestioningly doing his duty, and enjoying the advance and victory over the Turks. Although not setting out to do so this book, perhaps by what it omits, tells us more about why so many young Australians volunteered to fight in that war.

GIAI PHONG — THE FALL AND LIBERATION OF SAIGON, by Tisiano Terzani, Sydney, Angus and Robertson, 1976.

Reviewed by WO2 A. H. D. McAulay,
HQ FF Comd

The book has value as a report by an eyewitness, even if Terzani’s wide eyed all-too-naive approval of the Hanoi-PRG/NLF line and actions lessen that value somewhat. For a book which is claimed to be composed entirely of eyewitness reports and actual cassette recordings of conversations, there are too many obvious contradictions. A few examples are:

- The passages describing the pillage of houses, shops, BOQs, PXs, etc. when the exodus was taking place; yet later the NVA/NLF forces are described gluing small stickers over the doors of buildings which have their goods intact and which are to be inventoried by the new regime.
- The passage stating how vendors had to dye the pale Soviet petrol with purple, so buyers would believe it was US stock; yet later he writes that there was no petrol once the US stock was exhausted and the populace reverted to foot and bicycle.
• The statement that without orders, life changed and the population adopted the ways of the new regime; yet he writes of the loudspeakers blaring music, of editorials and articles in the sole newspaper, articles on radio and TV, and of the organisation of street, block and district committees.

• The passages describing how the students and youth turned against the decadent western culture, and burned books, magazines, records and tapes of pop singers. It was the students and young people who purchased these items, were the fans of the singers and frequented the "discos".

• The working class and students are said to be overwhelmingly for the NLF; yet he writes of how the new regime was careful in instituting its reforms due to the deep anti-communist feeling in the city. The 1968 Tet offensive foundered in the urban areas as the population gave little or no support to the VC local force and mobile force units who entered the towns.

Terzani states that he and two Vietnamese friends each day circulated through the city, meeting at night to compare notes. He relates many conversations he himself had with Vietnamese of all ages, both North and South; yet he is not credited with and does not state that he is fluent in Vietnamese. The thousands of servicemen who served in SVN, especially those who attended the various colloquial language courses, will realise how restricted is one's contact with the people, unless one is really fluent in Vietnamese, and able to differentiate between North, South and Central Vietnamese.

Terzani has adopted the phraseology of the NLF/PRG. The GVN forces are always described as "Saigon troops", "Thieu artillery", "Thieu time", "puppet troops", and so on. Like journalists before him, he writes of the city as a single being: "... Saigon — silent, holding its breath — did not sleep". I recall reading similar over-dramatised writings from Tet 68: "Saigon is a city of fear", ... while looking down from the Caravelle at the crowds, no different from those on any other night. Admittedly fighting was going on in some areas, but elsewhere, life in Saigon went on as normal.

He describes the fear of the expected bloodbath, stirred by atrocity tales from cities already fallen, and of course backed by other known killings, such as the slaughter at Hue in 1968. Terzani claims that the corpses in the mass graves near Hue were those of VC soldiers, and civilians killed by American bombing. He doesn’t explain why the mass graves were located away from the towns as they were, why so many bombing casualties had their hands tied, why so many were shot in the head or buried alive. Perhaps we underestimate the ingenuity of American pilots.

References to GVN officials, officers and soldiers are derogatory, except in the references to "Big Minh". They are described as obsequious, arrogant, or drunken, while NVA/NFL members are honest, down-to-earth fine types. He repeats the story of General Manh, Chief of Security, fleeing with suitcases full of gold, but ignores the fact that a suitcase could not bear the weight, and lifting and carrying it would be quite a feat. There are other incidents reported which are hearsay, certainly not seen by Terzani or his two friends.

The book describes the all-too-familiar reshaping of a nation under the leadership of the Party: "re-education" of teaching faculties at all levels; merging all trade unions into one federation; mass meetings and elections then and there (but nominations called for time and time again until only Party-approved candidates stand); formation of self defence groups to guard each factory, street, etc., against "enemy agents and saboteurs"; public criticism and trials; the only newspapers, radio and TV broadcasts are of the new regime; calls for denunciation of those who listen to foreign radio broadcasts; and so on.

If you served there and are interested in a biased eyewitness report, the book may be of value.

Erratum. In issue no. 2 of the Journal p. 62, we spelt the name of the publisher of the book "Ernest K. Gann’s Flying Circus" incorrectly. It should have read "Hodder and Stoughton". Our apologies for any inconvenience caused.
WHILE playing golf with several officers a few weeks ago, I managed to salvage a bogey on a particularly difficult hole. Noting my obvious relief, one of my grinning friends used his best imitation of an Australian accent in exclaiming, “Good on ya’, Mate!” That comment brought a laugh from the rest of us in the foursome, all of whom had served with the “Aussies” at one time or another during the Vietnam war. As we finished playing the last few holes, I could sense a bull session brewing.

We were soon settled in the clubhouse and, sure enough, one story led to another as we relaxed over our beers. Like any group of veterans telling their war stories, this particular conversation soon developed into a foursided contest with each participant trying to best the others with accounts of Australian derring-do. The combat tales were quite varied and the descriptions of different characters we had met were, to say the least, very colourful. In spite of minor differences in opinion, all of us could agree on two points: the Australians with whom we had worked were top-notch professionals, and we had all learned valuable lessons while serving with the soldiers from “Down Under.”

As I consider some of the points made in that informal discussion, it occurs to me that many of the things I learned while serving with an Australian in Vietnam had not only immediate utility, but have been quite valuable in the years since I last left the Far East. Many of the decisions I made later, while posted in Germany as a company commander of a tank unit and as a staff officer, were influenced by the keen observations made years earlier by a quiet, determined, and highly resourceful warrant officer in the A.A.T.T.V. Thinking back to that tour of duty, I can still remember how white the sand looked in the coastal region north of Hue in September, 1969. It seemed to stretch northward forever as I flew out of the First ARVN Division Headquarters, headed for the Vietnamese unit with which I was to work for the next seven months.

The French had called the area “The Street Without Joy.” As I scanned the desolate tidal flats below our helicopter that day, I had to admire the French for their way with words. It was, after twenty years of war, a thoroughly joyless place. Then, the pilot saw what he had been looking for — a circle of armored personnel carriers laagered on a bit of ground somewhat higher than the surrounding terrain. The metallic sound of his voice over the intercom brought me back to the business at hand. “There’s the ARVN cav’, Captain. They have an Aussie advisor, with them. He’s been out here by himself since the last American was wounded. He’ll probably be glad to see you.” Having said that, he returned to his controls and we quickly lost altitude as we approached a spot marked by a billowing purple smoke grenade. Just before removing
my headset, I got a last word from the pilot.
“Hope you like rice, Sir. Good Luck!”

The sand blown up by the helicopter had not yet settled when I was greeted by the Australian advisor. Within minutes, he was to provide me with the first of several important lessons that have stayed with me ever since. If I were asked to describe this first lesson, or perhaps give it a title, I would probably say this: Good manners and consideration for others need not be abandoned in the field. The lean man in faded olive drab and the black beret was smiling a genuine welcome as he extended his hand. Introducing himself, Mr. Smith* did not hesitate to shoulder part of my equipment as we trudged through the soft sand to where my Vietnamese counterpart lounged in the meagre shade of his personnel carrier.

Although I had little chance to talk to this friendly Australian as I puffed along under the mountain of gear that I had been issued in Saigon, he must have sized me up rather quickly. His sharp eyes took in the signs of my previous service in Vietnam. My faded jungle fatigues, battered boots, and Montagnard bracelet told the story of an earlier tour in the Central Highlands as well as the 25th Infantry Division patch on my right sleeve. During the introductions that followed, which he carried off smoothly in a mixture of Vietnamese and English, my new-found friend exhibited considerable savoir-faire as he presented me to the troop commander as “…a combat veteran who has returned to Vietnam to assist his allies in fighting Communism.” A small point? Perhaps. It was sufficient, though, to establish my credentials with my counterpart, a man who had seen a virtual parade of American “advisors” over the years. My first few weeks with the armored cavalry troop were busy, physically demanding, and confusing. I soon found that the commander of the troop was not particularly eager to practise his English, had no desire to emigrate to San Francisco, and was singularly un-impressed with my limited command of Vietnamese. Mr. Smith was to be my counsellor, instructor, and buffer during that trying breaking-in period.

The Australian began teaching me some basic Vietnamese phrases and displayed great patience at the end of each day as I happily reverted to English and prattled on incessantly about the wife, son, and hamburgers I so sorely missed. After listening to my questions and comments regarding the strange ways of the Vietnamese troops in the unit, Mr. Smith pressed another nugget of wisdom upon me: Don’t assume too much.

Many times since, I have reflected on his sound advice. As he pointed out, a professional officer, tied as he is to the doctrines and practices of his own service, and a product of his particular society, is especially susceptible to the pitfalls that await one who assumes that foreigners act and think as he does. It is far too easy to deal in superficial aspects of unit organization and tactics when serving with forces of different countries, ignoring the less obvious considerations of religion, values, and society. The surprise that comes from realizing that they really are not “just like us” can be a jolting experience. Luckily for me, “my” Aussie (as I had come to regard him) was able to help me over many of the stumbling blocks that tripped some of the poorly prepared American advisors in Vietnam.

After several weeks of preliminary drizzling, the monsoon season set in during mid-October. By that time, our troop had left the Hue area. We moved north into Quang Tri Province and assumed the defence of the eastern segment of the Demilitarized Zone (DMZ) that divided North and South Vietnam. During the last months of 1969 and the first quarter of 1970, we fought a series of sharp, dirty actions in which death and wounds often came amidst the cold, swirling fog which usually covered the sodden gray sand flats and scrubby foothills of the region. It was during this period of awful monsoon weather that I learned something else from Mr. Smith. When you’re truly miserable, “courage” can mean changing your socks. Yes, I said changing your socks! I could just as easily have said cleaning your weapon, checking the night positions in a driving rain, shaving, or even forcing a smile, telling a joke. When the elements seem

* Not his real name.
to lose their neutrality and ally themselves with the enemy, it is so easy, so enticing, to simply withdraw into your miserable shell, forgetting everything other than the futile attempt to stay dry. It was in just this type of situation that my Aussie displayed his own courage and determination. He said, "Any fool can sit like a lump in the rain. It takes a proper soldier to live and fight in this muck!" I listened, I learned. I changed my socks, drank my tea, shared the “CARE” packages his wife sent from Sydney, and learned, once again, to laugh in spite of myself. With Mr. Smith’s help, I fought and won the battle against the North Vietnamese, the weather, and my own self-pity.

Another point that he drove home was an obvious one, but one that has been frequently overlooked. Simply put, it was this: Americans can learn something from their allies. Too many Americans have felt, as I did, that “Made in U.S.A.” stamped on a piece of equipment necessarily made it a superior product. This point of view is not only shortsighted, but is also an indicator of the “tunnel vision” that can afflict soldiers of any nationality. Over the past few years, I have seldom missed an opportunity to expound on this theme to my fellow Americans. As a teaching point, I will often pull my handy Australian-issue ration can opener from my pocket. Although similar to the American type, the addition of an extra inch of tin provides not only a spoon, but the leverage needed to open a can of army rations without cursing. Want another example? Consider the fact that a pair of Australian army boots is still a status symbol among American veterans of Vietnam. Those Americans who managed to “acquire” a pair of these will not part with them. Talk to an American helicopter pilot about the advantages of the Australian metal cargo net and you will hear the oft-repeated comment, “Why don’t we have that piece of gear?” Of course, the point to be made here is not that Australians make a good can opener. I am talking about an appreciation of what we can learn from others if we will but try.

As the end of Mr. Smith’s tour of duty approached, we spent many evenings talking about his home and the family in Australia that he was so anxious to see again. One night, shortly before he left, our talk was broken by the distant, but unmistakable plop, plop, plop of mortar rounds leaving their tubes. We were already diving for cover when the first 82-mm rounds began exploding in the centre of the troop’s night position. Soon, ground flares began to pop as North Vietnamese sappers and infantry assaulted the thin circle of barbed wire ringing our perimeter.

During the next four hours, we fought off a succession of enemy ground attacks. On several occasions, the enemy breached our defences and fighting took place at close quarters.

It was during the last enemy assault that I looked up from my radio just in time to see a North Vietnamese running toward us with a grenade in each hand. Firing his weapon at a cluster of sappers on the other side of our perimeter, Mr. Smith did not see the danger approaching from behind. Thanks more to luck than to marksmanship, I was able to hit the NVA soldier with several rounds from my pistol. Knocked off his feet by the heavy .45 calibre slugs, the NVA slid to a stop at the Aussie’s feet. I think 1 will always remember the flash of my friend’s smile when, after a quizzical look at the dead man, he turned and said, simply, “Good on ya’, Mate.” This short phrase, coming from the professional that I had come to admire so much, meant more to me than he will ever know.

It was with real sadness that I bid farewell several weeks later to this man who had taught me so much. Both of us talked past the lumps in our throats as he boarded the helicopter that would carry him on the first leg of his long trip home. As soldiers of previous wars can testify, the bonds between soldiers of two nations fighting side by side can become exceptionally strong. Forged of friendship and mutual respect, these ties and the lessons that can be learned from one another should never be taken lightly. In my view, they may well be priceless. Today, as I look back on my experiences in Vietnam, the unpleasant thoughts are less distinct, the recollections of good times grow ever stronger. Running through many of my memories is the picture of that smiling professional soldier from Australia. I won’t forget the lessons he taught me. My Aussie, who, without knowing it, paid me his greatest compliment with the simple phrase, “Good on ya’, Mate!”

