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COLLINS, first of the Navy's new Collins Class submarines currently undergoing trials near Thistle Island at the mouth of Spencer Gulf, South Australia.
Photograph by Navy Photographics Unit

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Letters to the Editor

Douhet's Theories

Dear Editor,

To Air Commodore Ashworth (ret) who has responded to articles on Douhet in the May/June edition of the Australian Defence Force Journal, two points of clarification are warranted. First, the articles by Major Easton and me imply little about attitudes to Douhet circulating in New Zealand since both were prepared during studies in Australia. Second, my article does nothing to promote Douhet as a great air power prophet. Finding no rational account for Douhet’s status as a strategist, I suggested that Douhet’s exaggerated and prophetic polemics provide a more likely justification for his enduring appeal. It should seem clear to anyone who has read the article that this is a relatively judgemental finding.

Squadron Leader A Forrest
Point Cook

Air Power Theory

Dear Editor,

It is quite clear from his Author’s reply to my letter in the September/October edition of ADJF that Dr Stephens and I have a different definition of “strategic” in relation to air power. My use is the classic one relating to the use of air power directly against the enemy’s population and war industry within his home base. The Allied Strategic Bombing Offensive against Germany from May 1940 to April 1945 is a clear example of the strategic use of air power. For its part, Japan had absolutely no hope of conducting such an offensive against the United States homeland. The distances were quite beyond the radius of action of any bomber of that era, to say nothing if the tonnages of bombs that would have been required to even make a dent in the United States’ war production capacity.

Being a “vital centre” does not of itself render a target “strategic”. From April to August 1944 the RAF and USAAF heavy bomber forces in Europe were used to attack many a “vital centre” in support of Operation Overlord. Such attacks were, in parlance of the day, regarded as “tactical” because they were in direct support of the land campaign. They were, much to the chagrin of Air Chief Marshal Harris at the time, a clear and undesirable diversion of effort from the Strategic Offensive.

I am not saying that Japan’s air power would not have benefited by the development of four engine heavy bombers, merely that a strategic air campaign was quite out of its reach. All of Japan’s air power effort was, very wisely and in the first six months of the Pacific War very effectively, used in support of land and sea operations. Indeed, I would even go so far as to say that air power, much of it carrier based, was the key to Japan’s initial sweeping success.

Norman Ashworth
Air Commodore (Ret)

Industrial Relations

Dear Editor,

I was fascinated by the two articles on “Industrial Relations” in your September/October 1995 issue. While I do not question their accuracy or value, the one thing that stands out is that trying to impose the complexities of civilian Industrial Relations to the Australian Defence Force (ADF) is a confusing and irrelevant failure — even if it is Government policy.

My background is 30 years in the Permanent Army, followed by a degree in politics and economics at the ANU. After that I spent 10 years as a Federal Parliamentary staffer. This leads me to what I believe to be a better, safer and simpler way of sorting out ADF pay and conditions.

My starting point is that a standing army in particular, and that armed services in general, in our tradition, are a creature of the Parliament. They are not the servants of the Departments of either Defence or Industrial Relations. They certainly have nothing to do with the ACTU unless we wish to emulate the political commissars of Stalin’s USSR. In short, the “employer” of the ADF is the Parliament.

My solution starts with extracting the Defence Force Remuneration Tribunal (DFRT) from the “Industrial Relations Club” and making it the servant of a Senate Armed Forces Committee (SAFC). This Committee could be a new one or a sub-committee of an existing Senate committee. A SENATE committee is desired for two main reasons:

1. The House of Representatives is usually subservient to the Government of the day. On the other hand, on most occasions, the composition of the Senate is such that a bi-partisan approach is more likely. This is important, to reduce the risk of
the Executive regarding the ADF as its sole preserve and using it for Party political purposes.

2. Senators are elected for a 6 year term and, in most cases, are more likely to be re-elected for at least two terms than are members of the House of Representatives (MHRs). Furthermore, not having the heavy detailed electorate work required of MHRs, they have more time available to take part in committee deliberations. Consequently Senators are more able to gather a considerable amount of experience and expertise about ADF matters.

Such a Senate Armed Forces Committee could also be charged with making recommendations for promotions to “One Star” and more senior ranks in the ADF, but that is another story.

The DFRT should be allowed to raise matters as and when it so desires, but would also be required to report on matters when so requested by the Governor-General (in his role as Commander-in-Chief), the Government, the SAFC or the Chief of the Defence Force (CDF).

To provide flexibility a separate Appropriation should be made for pay and allowances for all ADF personnel. The dollar values of those pay and allowances should be determined by the application of guidelines determined by the SAFC. The Government would retain control of its expenditure by deciding the total numbers of ADF personnel.

The principal guidelines to be decided are:

1. The Individual Upper Limit. There is an existing high level Commonwealth Remuneration Tribunal which determines the salary packages of senior Commonwealth appointments such as MPs, Judges and Heads of various statutory authorities. This Tribunal could also determine the salary packages appropriate for the CDF and the Chiefs of the RAN, Army and RAAF.

2. Total Upper Limit. The DFRT could recommend the average salary for the whole ADF for determination by the SAFC.

3. Individual Lower Limit. Once again the DFRT could recommend the minimum salary for a member of the ADF who has completed recruit training.

In addition the DFRT could recommend, for determination by SAFC, pay levels for special “command” appointments, which could be significantly greater than the normal rates for the rank concerned, eg:

1. Captains of sea-going ships and watercraft.
2. Pilots of various aircraft and helicopters.
3. Commanding officer of an Army field force unit eg. of an infantry battalion.

4. Officer commanding an independent Army field force unit of squadron or company size eg. of an SAS squadron or of a field squadron RAE.

As at present the DFRT would continue to make and review special payments for special circumstances such as Submarine Allowance and Field Allowance, to be confirmed by the SAFC.

When the SAFC has made its determinations, perhaps having appended the approval of the Governor-General, the three Service Chiefs could then go ahead and sort out the detailed relativities within each of their Services. If some disputes arise because of apparent inequities between different Services, the DFRT, supported by the SAFC, could adjudicate. In any case, if the inequities were real, difficulties in recruitment or retention would be a compelling reason for the Service Chiefs concerned to make changes.

Placing the responsibility for pay relativities with the Service Chiefs means their management and morale responsibilities can co-exist.

None of this should be interpreted to mean that the search for productivity improvements should stop. Nevertheless it should be recognised that many of the aims of the new civilian “IR” changes have been stock in trade in the ADF for years eg. multi-skilling, career training and leadership rather than autocratic management.

Trevor Barker
Lieutenant Colonel (RL)

December 1941: RAAF at Kota Bharu and Kuantan

Dear Editor,

Dr. Laurie Barber’s article in the Australian Defence Force Journal, July/August 1995, prompts me to add a snippet or two in rebuttal of the calumny, still rife in some less than well researched historical works.

I refer especially to a recent British book (1995), Singapore: The Pregnable Fortress, which features shabby allegations about the performance, on 8–9th of December 1941, of two RAAF squadrons based in Malaya when Japan attacked, starting WWII in the Pacific. The uncomplimentary remarks by the author of the book allude mainly to the evacuations of Kota Bharu and Kuantan airbases by those squadrons; he relies, excessively, on doubtful assertions and wanting research, and disparages RAAF members involved, successfully and efficiently, in those evacuations. Moreover, book reviewers and editors of newspapers — unknowledgeable about the events — have regurgitated the disparagements. To rebut such
fication. I am able to give a first-hand account, having remained at Kuantan airbase for about 90 minutes after the last of seven No. 8 Squadron Hudsons departed for Singapore. My CO had given me approval to see if I might find a “serviceable” Hudson to fly to Singapore. Four or five abandoned ones stood on the airfield. This I managed to do, flying A16-23, a “hardly airworthy” specimen, left at Kuantan by No. 1 Squadron crews. A colleague, Flying Officer D.G. Dey, with my help, selected a RAF Vildebeeste that had a bullet hole in the engine front casing. We carved a wooden plug with which we stopped the hole to prevent oil escaping. Dey flew the ancient biplane to Singapore while I, single-handedly, delivered A16-23.

What has to be said is that the absolutely top imperative was to evacuate the seven serviceable Hudsons from Kuantan before the enemy bombed us again. And Hudsons got to Singapore would have been inoperative for missions next day without ground staff to service them, hence as many ground staff as possible were evacuated in the Hudsons, while those not flown out were under bounden duty to get to Singapore with all haste. No. 8 Squadron flew operations next day, 10 December. I flew a patrol, during which my crew and I watched Japanese torpedo bombers sink the battleship Repulse, and the battlecruiser Prince of Wales.

The author, in his book, makes great play of accounts given by a Pilot Officer Bulcock, Royal Air Force, (not RAAF as stated on page 228 by the author) and an army officer, Dick Clarke, Indian Army. Bulcock had not been in uniform more than a few months; he was a stores (equipment staff) officer, and not au fait with air operations and procedures. Lieutenant Dick Clarke, page 230, talks of “RAAF ground staff who manned the aerodrome.” RAAF certainly did not “man the aerodrome”: it was a Royal Air Force base, manned by RAF members and Malayan domestic staff. Also, why Clarke should be “surprised” to find it “more or less deserted” is tendentious. He would have known nothing relevant about authorised aircraft deployment. The author quotes another source, Pilot Officer Basil Gotto, RAFVR: “and rain and low cloud precluded the chance of another air attack.” This is entirely wrong. There was heavy low cloud and drizzle about 1500 hours, but by about 1630 hours the ceiling had risen and visibility ran out for kilometres. Strafing and bombing attacks would have been entirely feasible. And I should know what the weather was like about 1630-1700 hours, since that was when Dey and I travelled around the airfield examining aircraft. Our weather judgement was confirmed as we climbed away in flight.

Furthermore, the author includes, page 231 of his book, a statement attributed to a Lieutenant-Commander H. Austin, RN: “No action was taken by the Royal Air Force. The RAAF had no authority to render the airfield useless. Had we done so, severe disciplinary action against us would have been likely.

There are many other dubious passages in the author’s jottings about the RAAF at Kuantan. One other, an error not to be overlooked, is a statement by Bulcock: “No. 8 Squadron had rushed to their aircraft, dumped all bombs and equipment...” As I have emphasised, Bulcock knew little about aircraft procedures. Releasing bombs onto soft earth from parked Hudsons was a suitable method of de-bombing quickly, say to re-load with a different type of bomb in urgent circumstances. The author, in my opinion, can only have included this to further his tendentiousness.

In fact most of his composition about Kuantan and Kota Bharu is tendentious, even risible in parts. There is, in my opinion, hardly any incontrovertible hard evidence to carry his doubtful assertions, irrelevancies and misconceptions. Perhaps a prime example of his poor scholarship appears at page 231: “The hurried and unnecessary evacuation of Kuantan airfield...” And at page 227: “it (closeness of Japanese invaders) was not so at Kuantan, for there the Japanese Army was still three weeks away.” So, according to him, the Hudsons should have remained on an airfield that was entirely without effective air defence, where all aircraft would have been destroyed on the ground by Japanese air attacks. The mind boggles at this strategic novely.

For the Japanese Air Force had demonstrated at Kota Bharu the previous day how devastatingly they dealt with parked aircraft. During the day there were eight separate attacks by formations of enemy fighter aircraft, destroying Hudsons and other targets. No. 1 Squadron lost two-thirds of their machines there, including two shot down by enemy ships. Had No. 8 Squadron remained at Kuantan, there would have been similar destruction, probably within a day or two.

RAAF evacuation from those airbases, promptly and entirely, was a top priority and included movement of ground staff so that the squadrons could continue flying operations next day. Indeed, as with No. 8 Squadron, No. 1 Squadron sent Hudsons on patrol on 10 December. Some idea of the future value of having moved the surviving Hudsons to Singapore may be judged from the following record in No. 1 Squadron’s operations diary: “The total ships sunk or
believed destroyed by the squadron up to 1.3.42 was fifteen (15)." On that date the Allies surrendered Java to the Japanese.

After Kota Bharu and Kuantan, the Hudson squadrons fought from Singapore, Palembang on Sumatra, and airfields on Java. A majority of No. 1 Squadron became POWs: a majority of No. 8 Squadron was evacuated to Australia. I was one of those fortunate evacuees.

H.C. Plenty
Group Captain RAAF (Ret)
Whither Australian and New Zealand Naval Cooperation?

By Graeme Dunk

"Australia and New Zealand are as close as two countries that almost became one could be."
- Gareth Evans and Bruce Grant, 1991

"The time is not far away when it will be utopian, certainly for smaller nations, to maintain an independent land, naval and air force".
- Leo Delcroix, Belgian Minister for Defence, 1994

Introduction

The integration of the defence forces of Australia and New Zealand (A-NZ) has been discussed in some quarters as being an option to address the strategic goals of both countries in a more efficient manner whilst simultaneously providing a more effective military force. Given that Australia and New Zealand have formulated their respective defence programmes with special attention to the traditional and sentimental bond of the ANZAC legend, these two countries would seem to be particularly well suited to cooperative measures.

At present, Australia and New Zealand are linked through the Closer Defence Relations (CDR) arrangement and currently cooperate on a wide range of defence issues, including participation in regular high level consultation, combined exercises, training and personnel exchanges, logistic cooperation and joint activity in the region involving, especially, coordinated air and naval surveillance with South Pacific countries and the Forum Fisheries Agency. The Australian policy approach to CDR is to "maximise interoperability, complementarity and cost effectiveness", whilst New Zealand has a stated aim to "seek benefits through coordinated planning activities in pursuit of mutual interests and responsibilities; and harmonizing ... respective structures where possible but without prejudice to national aims".

This article will consider what form future naval cooperation between Australia and New Zealand may take. The operational integration of the surface fleets of Belgium and the Netherlands has been recently reported, and could possibly serve as a model for further development. Other more extensive cooperative options will also be examined against the strategic focus of both countries. The article will conclude that, whilst some further development of cooperative naval measures is possible, any move in this direction will be affected by the New Zealand anti-nuclear policy and the state of New Zealand's relationship with the United States.

Strategic Considerations

Australia and New Zealand have many similar traits and some important differences. They are both maritime nations, rely heavily upon the sea for development and sustainment, and are both vulnerable to interdiction of their sea lines of communication (SLOCs). The countries share a sense of closeness born of a common European heritage, historical commitments to other people's wars and the tyranny of distance. This closeness is manifested through the Closer Economic Relations (CER) trade agreement which removes restraints against each other's trade and creates a single A-NZ market. A range of other inter-Governmental agreements covering issues such as social welfare have also been concluded.

Australia and New Zealand are both Asia-Pacific nations, although geography dictates that New Zealand is more "Pacific" than "Asian". This Pacific focus was firmly enunciated in October 1987, by then-Prime Minister David Lange in a statement that "We not only accept but celebrate what the map tells us — that we are a South Pacific nation". This does not imply however that New Zealand's interests lie solely in the South Pacific; for they do not.

Economically, New Zealand has major interests with the European Community, Asia and the United States. From a strategic point of view, New Zealand recognises the importance of Asia to its future security, and has "become increasingly involved in developments in the Asia/Pacific region". The nature and extent of some of these relationships will be covered later.
Australia’s position cannot be so neatly defined. It is a Pacific nation in that it forms a bond to the Pacific Ocean and has major strategic concerns in this region. Australia’s Pacific strategy has been one of strategic denial to influences considered inimical to its interests, although the current approach is variously described as “constructive commitment in the South Pacific”\(^\text{11}\) and “strategic commitment to the South Pacific”\(^\text{12}\). Irrespective of the policy title, Australia and New Zealand have cooperated closely to address regional security concerns through participation in regional bodies such as the South Pacific Commission and South Pacific Forum\(^\text{13}\), support for regional initiatives such as the South Pacific Nuclear Free Zone and provision of assistance and encouragement to the island states as they attempt to come to grips with their particular problems (economic development, diminution of traditional cultural values, social pressures due to development, environmental issues)\(^\text{14}\).

Australia is also an Indian Ocean nation with strategic and economic interests in the region, although these have, to a large extent, been ignored by policy makers\(^\text{15}\). The exception is the consideration of the protection of the relatively exposed offshore territories of Cocos and Christmas Islands, and the security of the north-west approaches. These are strategic concerns which New Zealand does not share.

Lastly, but no means least, Australia is an Asian country in that its near neighbours form part of South-East Asia, and it has been to Asia that Australia has increasingly focused its strategic gaze and directed its efforts.

Australia views developments within South East Asia as fundamental to its security outlook. New Zealand also has concerns in this area, and particularly the referred impact to it from the effect of adverse developments upon Australia. Both countries consider Asia-Pacific economic interdependence, and the involvement of key powers such as Japan and China, as a key foundation for security relationships into the future. Mechanisms that keep regional countries, including the US\(^\text{16}\), harmoniously engaged are therefore to be encouraged.

Examples of common A-NZ activity within Asia are support for regional forums such as the Association of South East Asian Nations (ASEAN)\(^\text{17}\) (both countries were original dialogue partners with this group\(^\text{18}\)) and more recently for the institution of the ASEAN Regional Forum (ARF)\(^\text{19}\), as a suitable structure under which to discuss regional security issues. Both countries have also been active in the formation and ongoing development of Asia Pacific Economic Cooperation (APEC), and have both provided military and civilian personnel to the United Nations Transitional Authority in Cambodia (UNTAC).

In a more military vein, Australia and New Zealand are engaged in South East Asia through the Five Power Defence Arrangement (FPDA) with Malaysia, Singapore and the United Kingdom, and participate in the annual Starfish and IADS exercises conducted under this umbrella. Australia also conducts naval exercises with Indonesia and the other ASEAN nations\(^\text{20}\). New Zealand also provides training and advisory assistance to ASEAN countries under its Mutual Assistance Programme (MAP), and has formally stated the preservation of its partnership obligations under FPDA as a defence policy goal\(^\text{21}\). Australian policy mirrors this sentiment by stating the FPDA makes a practical contribution to regional security and is an example of successful regional cooperation\(^\text{22}\).

The above discussion serves to highlight the overlapping nature of Australia’s and New Zealand’s strategic outlook. A major policy difference exists however between the two countries with regard to the Australia New Zealand United States (ANZUS) Treaty.

The New Zealand decision to reject the visit of the USS Buchanan in February 1985, and its subsequent nuclear ships policy has resulted in the significant deterioration of the previous NZ-US defence relationship. The current NZ Government, whilst not repealing the anti-nuclear legislation, has however placed a high priority of redeveloping the US defence relationship. For its part, Australia has endeavoured to continue defence links with both NZ and the US separately to the point of describing the continuation of ANZUS on two of the previous three legs\(^\text{23}\).

The current state of the ANZUS alliance, if indeed it formally exists\(^\text{24}\), presents a security complication for Australia. Both the US and NZ relationships are valued by Australia although obviously affected by conditions of scale. The US relationship is important as it provides access to intelligence, high technology equipment, scientific research, logistic supply lines, training and education, and for the more problematical effect of keeping the US engaged in the region\(^\text{25}\). The NZ relationship, in comparison, is valued due to shared strategic interests and the contribution that New Zealand can make in the achievement of these goals. The task for Australia has been, and will continue to be, how to balance these two relationships.

The exclusion of New Zealand from the Kangaroo series of exercises, but the inclusion of Singapore,
Indonesia and Papua New Guinea, emphasises the problems of New Zealand’s acceptance in Australia’s strategic circle and demonstrates that, should Australia continue to value its relationship with the US, any moves towards amalgamation with New Zealand must be conducted with this in mind.

The future status of the US-NZ relationship is therefore fundamental to any future development of the Australian and New Zealand force structure or operational cooperation under CDR.

**Forms of Future Cooperation**

Closer collaboration in the force structure process is already the goal of both Australia and New Zealand. Bearing in mind that “Australia has been consulted in all of the capability studies conducted by New Zealand, to ensure the closest possible harmony of future force structures”\(^1\), the question is now what sort of additional cooperative measures could be possible?

A number of enhanced levels of cooperation are theoretically possible. These range from tinkering at the edges of the CDR by considering support arrangements, through the rationalisation of combined operating bases and infrastructure, to integration into a single force with a combined A-NZ force structure.

**Tinkering at the Edges.**

The simplest option for future cooperation is *status quo*, to tinker at the edges of the current arrangement. Such activity has been, and no doubt can continue to be, conducted without impact on Australia’s relationship with the US. Cooperation of this sort will, in all probability, be welcomed by the US as it keeps New Zealand involved, albeit at the periphery, in the affairs of the “Western strategic club”.

An indication of the harmony that can be achieved in force structures is demonstrated by the New Zealand participation in the ANZAC frigate project (*albeit* with some political teething problems and arm twisting). Such equipment commonality will inevitably, at some stage, raise the question of support rationalisation and defence planners will therefore have to consider which facilities will be New Zealand based and which will be in Australia. This may involve the splitting of training, warehousing and other support facilities. The answer to this question will in all probability be a politically-contrived compromise.

Cooperative acquisitions and further cooperation under CDR are likely to provide economic benefits for both countries, but the real implication for New Zealand is that their naval force will increasingly resemble a mini-version of Australia’s.

**Operational Integration.**

It is worthwhile at this point to briefly consider the model of operational integration of surface fleets provided by Belgium and the Netherlands. In some respects the Belgium/Netherlands pairing is analogous to that of Australia and New Zealand. The countries are neighbours, the fleet of one is much larger than the other and they have similar strategic outlooks. The first major difference is distance. Belgium and Netherlands share a land border, and the distance between the respective naval bases is only 200 kilometres. In northern hemisphere terms, naval bases in Australia (Perth and Sydney) are located the distance apart of London and Istanbul, and the distance between Sydney and Auckland is comparable to that from Istanbul to Tehran.

The second difference is strategic emphasis. Unlike Belgium and the Netherlands, which are both members of a mature military alliance with a defined structure (NATO), Australia and New Zealand operational cooperation could be best described as “loose association” rather than as an “integrated posture”.

Under the Belgium/Netherlands model the respective Australian and New Zealand surface forces would remain in the current bases, and ultimate command would remain with the respective Governments. Operational control would however be consolidated under the Maritime Commander Australia, and the maritime headquarters would be jointly staffed by Australian and New Zealand naval personnel. Such an arrangement could be concluded without any major impact on the Australian-US defence relationship, but would require the creation of “Australian Eyes Only” areas within what is ostensibly a combined facility to ensure that US sensitivities regarding US-sourced information are not affected.

Cooperation along lines similar to the Belgium/Netherlands model would therefore require the development of a suitable command structure, and agreement to new lines of responsibility. The Maritime Commander Australia would need to be responsible to the New Zealand Government with regard to the tasking of its vessels and to ensure that its particular strategic objectives were appropriately addressed.
Base and Infrastructure Rationalisation.

One issue that needs careful consideration, and which may be possible without any change to New Zealand’s anti-nuclear policy, is that of the rationalisation of bases and supporting infrastructure. The aim of such rationalisation would be to collocate the naval activities of both countries throughout Australia and New Zealand, and hence to achieve economic benefits through the more efficient use of combined infrastructure and other assets. Command arrangements could however remain unaltered, or could follow the lines associated with operational integration.

At face value it could be argued that any such rationalisation should involve the closure of bases in New Zealand and the relocation of defence assets into Australia. This situation could be supported by arguments that New Zealand is intrinsically a more secure country than Australia, as dictated by geographic position alone, and that New Zealand sees Australia’s security as fundamental to its own. Relocation of the New Zealand Defence Force (NZDF) into Australia would therefore serve its direct military interest.

Such arguments are however somewhat simplistic, and take no account of the political aspects. Consolidation of the NZDF into Australia is unlikely to be an acceptable outcome for the New Zealand Government or for the New Zealand public. Any moves toward rationalisation are unlikely to proceed if one country considers that it will suffer from high unemployment or other adverse economic impact. Any rationalisation agreement must therefore be a compromise, no matter how weighty the military and strategic arguments may seem to be.

One option for base rationalisation would be the consolidation of the NZDF and the Australian Defence Force (ADF) initially into two major naval bases; located in Perth and in Auckland. The former would allow easy access to the important area of South East Asia and also into the Indian Ocean, whilst the latter is ideally situated for activities within the South West Pacific. The current fleet base at Sydney, already under pressure for relocation, could be downgraded to provide support for a combined training and work-up area off the Australian east coast. Combining training activities into this area would be consistent with the current position of naval exercise areas, the availability of air support from the naval air station at Nowra (already host to the NZDF A-4 Skyhawks), and provide ready access to the new armament complex to be sited at Port Wilson in Victoria.

A build-up of the Darwin naval base, already planned to be the site for the basing of the Offshore Patrol Combatant (OPC) helicopters, would then complete the strategic picture for naval activities in Australia and New Zealand. Such a base would be required to logistically support major naval units for an extended time during any defence contingency in northern Australia. Each country would utilise the other’s bases for national objectives, even to the extent of basing ships there, whilst retaining separate identities.

Naval cooperation with New Zealand along these lines would be consistent with Australian defence policy which seeks to rationalise defence facilities in southern Australia, including the disposal of unnecessary properties. Paul Dibb has also made the assessment that “the construction of forward bases in the north and west of Australia is an important element of our strategic planning. Bases in these distant parts of Australia are central to the concept of self-reliance”.

Rationalisation and consolidation of naval bases across Australia and New Zealand may therefore be one way in which to gain resource efficiencies and to advance Australia’s policy of defence self-reliance. Such a move may therefore be one way in which to gain resource efficiencies and to advance Australia’s policy of defence self-reliance. Such a move may however have significant effects on personnel; both on those serving and on recruitment, and this factor would also need to be considered.

Operational Rationalisation.

A deeper level of integration could be operational rationalisation. This could see an agreement between Australia and New Zealand whereby naval activity is concentrated in the area of primary strategic importance to each country: Australia into South East Asia and New Zealand into the South West Pacific. The concerns of each would be represented by the other to the countries of the region.

The advantage of this approach would be the most effective use of scarce naval resources, focused into the key strategic areas. One obvious disadvantage would be that regional states could perceive a downgrading of Australia’s interests in the pacific islands and a New Zealand’s in Asia. This would be contrary to the Government policy of both countries and may therefore require the commitment of other resources to demonstrate this not to be the case; thus negating any savings from rationalisation. Another would be the difficulty in differentiating between activities conducted for one country and those ostensibly undertaken for the other.
It is unlikely that either country would wish its strategic interests in areas of importance to be solely in the hands of the other; no matter how close the relationship.

**Total Force Integration.**

The ultimate level of integration, constitution of a combined force with a single command and force structure, would be even more difficult to achieve and to administer. An inter-Government agreement on the use of such a force, and the development of combined contingency plans would be required, together with the institution of an A-NZ military council to implement the political wishes of the two Governments, and to report back to them.

It is difficult to perceive however that either country would be willing to sacrifice the sovereignty and independent action that an indigenous naval force bestows. The use of naval forces to support one country's foreign policy may be curtailed by inter-Governmental policy nuances. The result would be a diminution of the flexibility, utility and ubiquity of national naval power.

For New Zealand, being the smaller party the perception of total integration may be one of capitulation, of relying upon Australia for its defence to a greater extent than both countries have relied upon first the United Kingdom, and then the US, for security. For this reason alone total amalgamation may be deemed unacceptable by the New Zealand Government.

Until the resolution of the New Zealand anti-nuclear issue in a manner favourable to the US, or a significant downgrading of the importance of the US relationship in Australia's defence planning, integration into a single force will not be possible. Neither of these events is likely to happen in the near or foreseeable future.

### Economic Considerations

In any significant development past the current CDR agreement there will be a requirement to define and agree supporting budgetary commitments. Such outlays will be required to contribute to the operation of a combined command structure, to provide and maintain agreed levels of support in any base and infrastructure rationalisation and more particularly to underpin the structure of a totally integrated naval force. Inter-Government commitment to long term defence outlays will however reduce the flexibility of Governments to frame and manage their individual budgets, and in the first instance an increase in the New Zealand defence outlay of 1.4 per cent of Gross Domestic Product (GDP) would be strongly advocated by Australia. Such financial commitment on the part of Government would mitigate against any significant further development.

### Conclusions

The strategic aims of Australia and New Zealand, although overlapping to a significant degree, have differing foci; Australia's in South East Asia, New Zealand's in the South West Pacific. This difference in strategic emphasis will prove important in the consideration of further forms of naval cooperation. The major difference between the two countries, that of the A-NZ-US defence relationship triangle, will severely hamper any cooperative measures.

The total integration of surface fleets will not achieve national objectives, and in fact is likely to restrict the ability of Governments to employ naval forces in support of foreign policy objectives. This is due to the lowest common denominator approach that would inevitably ensue.

Operational rationalisation is similarly not a viable option due to the regional perceptions that would accompany such an agreement. Neither of these two options could be pursued without significant developments in the New Zealand-US defence relationship.

The rationalisation of naval bases and supporting infrastructure across Australia and New Zealand may be an option worth further consideration and could be pursued without impact on the various defence relationships with the US. The consolidation into major naval bases near Perth and Auckland, the build-up of the capability of the Darwin naval base, and the downgrade of facilities in Sydney would be consistent with the strategic outlook of both countries.

Operational integration along the lines of the Belgium/Netherlands model could be a possibility, but would be hampered by the need to develop new international lines of command and responsibility. Some administrative burden would be borne by Australia to ensure that US information was protected.

The most obvious cooperative measure is that of CDR tinkering, of fine tuning the level of cooperation that is currently undertaken. Evolutionary development of force structures through common acquisitions will, however, inevitably lead to the need to consolidate logistic support, training facilities, warehousing arrangements and other aspects of interoperability. In time, such moves will lead to the consideration of base and other support rationalisation.
NOTES
1. Evans, G and Grant, B; Australia’s Foreign Relations: in the World of the 1990s, Melbourne University Press, Melbourne, 1991; page 164.
4. Evans, G and Grant, B; Australia’s Foreign Relations, 1993; page 166.
7. Lok, J.J; “Belgium, Netherlands plan joint surface fleet”.
9. Australia is New Zealand’s largest trading partner, with the European Community second, Japan third and the US fourth. The combined north-east Asian economies of Japan, Republic of Korea, China, Taiwan and Hong Kong take 26 per cent of New Zealand’s exports and provide 23 per cent of its total imports. (Source: New Zealand Official Year Book 1993 (96th edition), Department of Statistics, Auckland; chapter 2, page 464.
13. For a brief description of these bodies see Evans, G and Grant, B; Australia’s Foreign Relations, page 64.
14. Australia’s difficulties in reconciling the past (denial) and current (commitment) approaches to the South Pacific can be seen in the Malaysian logging example. Australian protests with regard to logging practices, particularly in Papua New Guinea and the Solomon Islands, has been met with Malaysian comments that Australians “think those territories are theirs” and other similar reactions. See for example, Bromhy, R; “Logging ambivalence causes woes”, The Australian, 31 August 1994; page 15.
15. SR 93 dismisses the Indian Ocean with the assessment that “South Asia will not, within the next few years, become a decisive factor in Australia’s, or our nearer region’s security concerns”. (para 1.26). In the book Australia’s Foreign Relations, Gareth Evans and Bruce Grant note that Australia’s Indian Ocean security concerns include economic factors, nuclear proliferation, and population pressures (particularly if that population cannot be fed), and discusses Australia’s approach to the region in terms of “comparative neglect” and “insufficient attention” (pages 242/244).
16. For comment on the potential for the US to affect future regional events, both positively and negatively, see Lee Kwan Yew, “Why American policy towards China is mystifying”, The Straits Times, 20 May 1994; page 34. See also Woolcott, R; “America’s Asia policy erratic, unpredictable”, The Straits Times, 26 May 1994; page 28.
17. The ASEAN countries are Indonesia, Malaysia, Singapore, Thailand, the Philippines and Brunei.
18. The other ASEAN dialogue partners are the US, the European Community (EC), Japan, South Korea and Canada.
19. In addition to the ASEAN countries and the dialogue partners, the Regional Security Forum also includes Russia, China, Vietman, Laos and Papua New Guinea.
22. Strategic Review 1993; paragraph 3.9 and paragraph 3.11.
23. Evans, G and Grant, B; Australia’s Foreign Relations, page 168.
24. For discussion on the collapse of ANZUS, and for an argument that the treaty no longer formally exists, see Thies, W.J and Harris, J.D; “An Alliance Unravels: The United States and ANZUS”, Naval War College Review, Vol. XLVI, Issue 348, Summer 1993; pages 98-126. Australia’s security policy however continues to extol the virtues of, and the continuation of ANZUS, albeit without New Zealand’s participation.
25. Strategic Review 1993; paragraph 4.2.
30. Tensions in the current A-NZ relationship with respect to defence outlays were reported at McPhedran, J; “NZ defence spending tops of PM’s agenda”, The Canberra Times, 5 July 1994; page 5.

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Who could have imagined that he would be the first of over 200 million passengers?

Who could have imagined that an airline born in the outback 75 years ago, would one day link over 90 destinations around Australia and the world? Or that our first passenger, Mr Alexander Kennedy, would be but one of over 200 million people to fly with us? Indeed, who could have imagined that this year, we would celebrate the 75th birthday of an airline founded on a dream, that became the pride of a nation?
The Teaching of Military Ethics

By Captain Keith Joseph, RAAMC

Introduction

You are a section commander, advancing after a hasty attack on an enemy position. After reorganisation, you attend to the wounded: one of your riflemen who will require medical evacuation and one of the enemy who is more seriously injured, but can be saved with some effort on your part. Who do you treat first with your limited medical supplies? Who do you evacuate first?

This is a problem typical of those that will face soldiers during hostilities. There are a large number of considerations relevant to solving this problem — those of military effectiveness, of obligations under military and international law and of morality. This moral question may be considered a question of military ethics. In this article I will therefore be concentrating on the teaching of military ethics in the Australian Defence Force (ADF). While the emphasis will be on my own Service, the matters discussed should be relevant to the other two Services.

The article will start by considering the nature of military ethics and why it is important to the ADF. Following this will be an examination of the teaching of military ethics in the Australian Defence Force (ADF). While the emphasis will be on my own Service, the matters discussed should be relevant to the other two Services.

The article will start by considering the nature of military ethics and why it is important to the ADF. Following this will be an examination of the teaching of military ethics. It should be emphasised from the start that the objective of teaching military ethics is not to make soldiers into moral philosophers: it is to give them the practical skills to resolve ethical problems related to their service both in peace and in war.

What is Military Ethics?

Military ethics is the conjunction of two areas of human action: military action, and applied ethics. Military action is the use of organised forces such as armies, navies and air forces, to further the interests of a nation. Applied ethics is derived in large part from moral philosophy and is concerned with the practical problems of morality. It should be noted that in this article I will use the terms “ethics” and “morality” interchangeably.

Ethics is not the same as legality; simply following rules, be they legal or allegedly moral, is not the same as acting ethically. Legal rules, such as statutes, may result in evil or immoral consequences. For example, there is little doubt that German laws in the 1930s, discriminating against the Jews were legal, but quite wrong. Moral rules, even if originated with the best of motives, will not be able to cope with every situation and may even be counter-productive. There is a need for an intelligent and reasoned response to ethical problems, which unthinking adherence to a set of moral rules cannot provide. Indeed, the failure of the Honor Codes at West Point and the other military academies in the United States in the 1960s and 1970s is evidence of the failure of simply relying on moral code.

Military ethics should therefore not be approached simply as a set of rules which can be applied to obtain a moral result. Rather, a combination of factors go into making ethical decisions. Obviously, moral rules will be one of these factors. Equally important will be the character of the person: a leader whose concern for others outweighs his concern for himself is far more likely to “do the right thing”. Finally, commonsense is important; a person must be able to think clearly and sort out in their own mind relevant factors in coming to a moral decision. This combination of moral character and the use of commonsense might be termed “moral commonsense” or moral reasoning. It is this moral reasoning which will guide leaders and soldiers to make morally, as well as militarily, correct decisions. Therefore, the teaching of military ethics should concentrate on the development of moral commonsense and reasoning in officers and soldiers.

Of course, there are few military problems in which the primary concern will be ethical. As the example at the beginning of this article illustrates, ethical concerns will arise along with other concerns such as the maintenance of military effectiveness and obligations under military and international law. Part of the skill that needs to be developed in military leaders is an ability to resolve the demands of conflicts between those various concerns: moral reasoning is a significant part of this skill.
The Importance of Military Ethics

Military ethics is important for many reasons, a few of which I will briefly canvass here. Firstly, it is of the essence of leadership to be concerned for people and ideals other than yourself. I take it as true that a self-interested person may make a good manager, but will not have that concern for the task at hand, or for his or her subordinates, that is necessary for a leader. This concern for others is, in itself, a fundamental moral value. When we start considering the interests of others — as in the problem with which this article starts — we start weighing up moral interests and will be faced with ethical problems.

Secondly, it is extremely important for officers and soldiers to know that the tasks that they are doing are directed towards a worthwhile end. If they do not believe that what they are doing is right, then morale and discipline cannot be sustained.

Finally, being ethical is an end in itself. We are a nation that pride ourselves on “doing the right thing”: this is probably even truer for the Defence Forces than it is for the community as a whole. Military ethics is an essential part of “doing the right thing”.

Who Should be Taught Military Ethics?

Those people who are leaders — most obviously, our officers — need to have a good understanding of military ethics from the earliest part of their training. Like all Service personnel, they have an immediate moral responsibility for individual actions. However, they also have a weighty moral responsibility for the welfare of their subordinates and for the collective actions of those under their command. Thus, obviously, we would need to teach military ethics to our officer cadets. Indeed, the importance of military ethics is recognised by its being included as a part of the syllabus for ARA and AReS officer cadets.

Our teaching in Australia is largely based on teaching in the United States, which in turn has been significantly influenced by the book by Stromberg, Wakin and Callahan, The Teaching of Ethics in the Military. Much of this teaching is based on the idea that if we inculcate ideals and virtues such as honour and loyalty in our officer cadets, then ethical conduct will follow:

The task of teaching military ethics must include the challenge of enabling the military profession to rationally understand and accept these “military virtues”. Morality and war, military honour, the
military skill. From a teaching viewpoint, it is also necessary to ensure that teaching is relevant: any hint of irrelevance or unconnected theory, and students will, correctly, dismiss it out of hand.

Therefore, at all levels of teaching, it is necessary to ground applied and military ethics in the practice and concrete experience of the students. You start by drawing on their experience; for example, by posing moral dilemmas that the students can relate to. You let them discuss it, and in the discussion draw out various lessons, such as the need to include all relevant facts. Having done that, it is possible to show how certain moral principles and values apply and help resolve the problem being discussed. How this can be done in practice at the various levels of students involved, will take up most of the rest of this article.

However, before considering how teaching should actually take place, we should consider who should be teachers of military ethics. The ideal combination would probably be someone with long experience in the Defence Force, preferably including active service, and training in philosophy or ethics. However, unlike the United States, formal courses in philosophy and ethics are not taught in Service academies as a part of undergraduate or postgraduate studies. It should be noted though, that there are now postgraduate courses in applied ethics being run at several Australian universities; these courses would undoubtedly benefit any officer who is going to have a significant role in the teaching of military ethics.

Another source of teachers of applied ethics would be chaplains. It seems clear that chaplains ought to be involved with the teaching of military ethics, as it is closely related to their work in character development. Further, chaplains provide moral advice to Service personnel at all levels from the private soldier to the most senior officer. Chaplains should therefore be involved in training in military ethics at all levels. Having said that, however, it should be noted that ethics and moral philosophy are distinct from theology and chaplains with a significant involvement in the teaching of military ethics may require further training. A practical problem may also arise if ethics is identified closely with a particular denomination or religious viewpoint.

Another source of teachers would be Officers, Warrant Officers and Non-Commissioned Officers who have an interest in the area; their training as teachers of military ethics could be catered for by short courses held within the Defence Force. Weekend and week-long courses in medical ethics aimed at health care workers are run by several Australian institutions: this type of short course format could be easily adapted for the teaching of military ethics.

A source that would not be recommended however is academics without experience of the Australian Defence Force: they would lack the understanding of the practical problems faced by members of the ADF to directly teach military ethics to Service personnel. However, they would have a role in "teaching the teachers", by expanding the knowledge of philosophy and ethics of those likely to be teaching military ethics.

### Military Ethics for Officer Cadets

The objectives in teaching military ethics to Officer Cadets would be as follows:

- to develop in cadets an understanding of what military ethics is;
- to instil in cadets an appreciation of the importance of military ethics; and
- to develop in cadets moral reasoning abilities necessary to enable ethical behaviour relevant to a junior officer.

How would these objectives be implemented? "Adhere to the Military Ethic" is already a terminal assessment on First Appointment Courses, but it is understood in fairly narrow terms as the display of appropriate character traits, and doesn't fully encompass moral reasoning as outlined above. It therefore needs to be more formally assessed.

Several periods of lectures, participation in a debate or seminar presentation, and submission of an essay under examination conditions would fulfil the above objectives and would not require much more time from cadets than is presently spent on military ethics. In particular, it could be combined with other terminal assessments (such as those related to public speaking and presentations) to the benefit of both areas.

In the United States, students at Service academies have the opportunity to undertake elective studies as undergraduates in ethics or philosophy. Unfortunately, this opportunity does not present itself to cadets at the Australian Defence Force Academy. At best, some Army Reserve officer cadets, particularly those training in University Regiments, have the opportunity to include philosophy and ethics as part of their studies, but this is devoid of any military reference.

It would be desirable if officer cadets or officers with a real interest in ethics were able to undertake elective studies in the area. Unfortunately, as the training system is structured at present, this is not
going to be the case. The best that could be achieved within the present system is for Service personnel to be encouraged to undertake civilian schooling in the various postgraduate applied ethics courses that are available.

**Military Ethics for Officers**

One would envisage that this would be taught at Staff College, relevant to the level of Staff College being attended. The overall objective would be to develop an understanding of military ethics and an ability to reason about ethical problems appropriate to the level of responsibilities that the graduate would have on promotion.

At Junior Level there would be revision of material covered at Officer Cadet Level, but with emphasis on problems that the officers have experienced so far in their Service. It would be assessed by participation in class discussion. There would also be an assessable essay submitted on a problem in military ethics arising from administrative responsibilities.

At Intermediate Level an additional objective would be to develop an understanding of how to convey information about military ethics, either as a teacher, or in the control of their subordinates. There would be a problem, as part of a Tactical Exercise Without Troops (TEWT), which would have significant moral concerns which would need to be addressed. For example, the TEWT problem might concern an attempt to capture a well-defended town with a resident civilian population and a number of sites of historic or religious significance: this would raise a number of moral, political and legal considerations as well as those related to purely military concerns.

At Senior Level, the objective is to develop an understanding of the importance of military ethics in the “big picture”. This includes not only an understanding of how to resolve moral problems, but also an ability to analyse the ethical implications of policy making and decisions.

**Military Ethics for Soldiers**

As has been inferred above, the demands of military ethics are going to be more prominent for leaders (such as officers) than soldiers. Having said that, however, all soldiers can be confronted by ethical problems. As soldiers move on to leadership positions as Non-Commissioned Officers and Warrant Officers, the demands of military ethics will increase.

Therefore at recruit level, it is sufficient to develop in soldiers an awareness of what military ethics is, and an understanding that they have moral obligations as human beings and as soldiers. At the other extreme, as Warrant Officers, soldiers will be called upon to exercise many leadership skills, including giving advice to junior officers. Many of the problems that they have to deal with will have significant moral aspects. Therefore, as soldiers advance up the ladder, the understanding and ability to apply military ethics will need to increase.

At recruit level, the main objective would be to familiarise recruits with the concept of military ethics — this would be best done as part of the character guidance package conducted by chaplains.

The first formal instruction in military ethics would occur on the all-corps Junior NCO Course. The objective here would be to give the students an awareness of the ethical problems they may face and how they might be resolved. Military ethics would not be assessable as a separate terminal, but would be taught as part of leadership, with emphasis on the moral responsibility that goes with leadership. The best means of instruction would probably be by participation in group discussion looking at moral issues, followed by a brief presentation by the student on their resolution of this problem. A suitable example might be the problem given at the beginning of this article.

On the all-corps Senior NCO Course the objective would be to ensure that the students would be able to deal with moral problems likely to arise in their service as Senior NCOs. It would be taught as part of leadership, as part of the discussion of the moral traits that a leader should possess and as part of the Laws of Armed Conflict. In the latter, students would be exercised by debating a moral problem arising out of the obligations of the Geneva Convention, and how this might affect military effectiveness.

Warrant Officers need to be able to deal effectively with the ethical aspects of military problems and provide advice to both subordinates and superiors on those considerations. Thus the objective of teaching military ethics on a Warrant Officers Course is to ensure the student understands military ethics and is able to resolve ethical problems that are likely to arise in their service as a Warrant Officer. This would be done by having military ethics as a separate terminal, which would be formally assessed. A suggested method of assessment would be by an essay in which the students would have to discuss the resolution of a problem which had significant ethical aspects. Such
an essay could also deal with other aspects of military service, such as leadership or administration, which are also problem orientated.

**Conclusion**

In this article, various aspects of teaching military ethics have been considered. With minimal effort, it would be possible to modify existing training courses within the Defence Force to encompass military ethics in the leadership terminals of courses for both officers and soldiers.

The aim of such training is to hone the reasoning skills of Service personnel in dealing with ethical problems that are likely to arise in their training. One problem that is likely to arise with this training is finding suitable teachers of military ethics — this would probably be the most intensive and costly part of the process of incorporating military ethics more fully into training syllabuses.

Military ethics is important. Leaders who are blind to the moral consequences of what they do will probably have little regard for the welfare of their soldiers, and will be more likely to be involved in criminal and unethical behaviour. The moral obligations on Service personnel are increasing, both because of the increased technological power they possess and because of the increasing numbers of laws trying to regulate the conduct of armed conflict. There is therefore a need for a more formal approach to military ethics; this article has outlined suggestions as to how this may be done.

**NOTES**

1. Most of this article is drawn from my experience in civilian life as a student and teacher of moral philosophy and applied ethics, and from my service in the Australian Army Reserve as an instructor of Officer Cadets and other ranks.
2. There is a long philosophical tradition that would seek to distinguish between the uses of the word "ethics" and "morality", on the basis that morality deals with customs and etiquette and ethics with the underlying description of how morality came about. However, this is not universally accepted. For a further description of these terms, see William K. Frankena. *Ethics* (2nd Edition). Prentice-Hall Inc., New Jersey, 1973, pp. 4 ff.
5. Ideally, our laws should be moral; however, with the best will in the world, no law maker is going to be able to detail laws which can deal in a moral way with all situations. Such an attempt at comprehensive legislation for behaviour will end up being cumbersome, bureaucratic and counter-productive.
7. Stromberg et al, p.17.

Captain Keith Joseph was enlisted into the Army Reserve in 1980, and had a variety of postings, mainly as a medical assistant (1 Fd Amb, 4 FER) and as an instructor (RTU 2 Trg Gp). His last posting before being commissioned was as a W02 at the University of New South Wales Regiment. In 1995 he was appointed as an officer, and again posted to Regimental Training Unit, 2nd Training Group. In his civilian occupation he works as a lecturer at the Australian Catholic University, where he teaches moral philosophy and is involved in research on health care ethics.
Australia Remembers records many of the activities of Australian Service men and women who served overseas and at home during World War II. It also records the role played by the men and women of the Australian Defence Force in ensuring that the ceremonies for the pilgrimages of the "Australia Remembers" program were conducted in the most fitting and solemn way.

This is the 8th in a series of books produced by the Australian Defence Force Journal commemorating anniversaries of Australia’s participation in war.

Australia Remembers is available from the Office of the Australian Defence Force Journal at a cost of $49.95
Chaos Theory and Intelligence Analysis

By Lieutenant Colonel I.G.R. Wing

"... methods of intelligence must never become too rigid."
— Manual of Military Intelligence in the Field, 1922

Introduction

Commanders have always asked the fundamental intelligence question: “what will my opponent do next, and in what strength?” Those appointed to answer that question combine accrued knowledge, available information and intuition to reach useful predictions. The importance of intuition and its employment by successful intelligence officers, coupled with the secrecy required to protect sensitive sources of information, have made the business of intelligence a rather introspective occupation. Intelligence is less clearly defined than many of the other skills required in conflict and its processes and outcomes are seldom straightforward.

New developments in conflict and in the technology of information collection are also changing the nature of intelligence. For these reasons, the study of intelligence, be it an art or a science, may benefit from lateral thinking and may absorb useful new ideas from other philosophical disciplines.

This article will describe a challenging and somewhat controversial approach to the study of order and disorder: chaos theory. Elements of the theory will be applied to the discipline of intelligence analysis and some techniques for its use will be outlined. It is hoped that the article will contribute to discussion about the underlying philosophy of intelligence analysis.

Chaos Theory

Chaos theory developed from other theories which have sought to understand the behaviour of changing systems. During the nineteenth century there were two types of such theories. Deterministic theories posited that the future is derived from the past with no apparent need for probability. Theories of probability, on the other hand, posited that the future develops independent from the past as a result of random factors. These theories were redefined during the first half of this century and quantum theory advanced the study of systems with increased emphasis on the calculation of probabilities.

Quantum theory encounters difficulties in the mathematical prediction of even simple systems because apparently identical inputs may lead to different results. This is partly because it is impossible to accurately measure the condition of all of the elements of a system to the nth degree. Some degree of error, however minute, will always lead to a variation in the result. This also occurs because an object which feels the effect of more than one variable force becomes persistently unstable. In more complex systems this instability is magnified exponentially. Each small change acts upon the other actors and objects in the system and leads to other changes. This persistent instability, and the challenge which it poses to students of change, has become known as chaos theory.

But chaos theory is more than a recognition of the effect of random phenomena. Paradoxically, it enables outcomes to be predicted through the study of random factors themselves. This is because chaotic behaviour actually obeys simple laws and thus there is order in chaos.

The flapping of a butterfly’s wings cause a tiny disturbance in the atmosphere which contributes to chain reactions in atmospheric change which result in gales and hurricanes. This seminal idea from the science of weather prediction, the butterfly effect, has become something of an icon in the study of change. (All systems of activity, both natural and human directed, involve change. People involved in the study of systems often seek to predict the nature, rate and scope of that change. Intelligence analysts are a case in point.)

Mathematical predictions concerning the behaviour of complex dynamic spatial systems, which are subject to chaos theory, identified recurrent behaviour by particular actors. Predictable phenomena were formed in apparently chaotic systems operating over prolonged periods. These phenomena, known as attractors, vary in their predictability. Very simple chaotic systems tend to settle into modes of behaviour
which contain few surprises. Very complex systems may eventually form a geometric form although its appearance may be non-periodic and so complicated that it passes unnoticed. Strange attractors are the hidden patterns of order within the disorder of chaos.

The Relevance of Chaos Theory

Those of you who have persevered with this article so far will be pleased to read that it is beyond its scope to delve further into the details of chaos theory. But hopefully the relevance of chaos theory is becoming apparent. Chaos theory is more than a scientific doctrine, it has been employed as a method of breaking down existing paradigms in the study of all kinds of systems. Chaos theory is now used in chemistry, biology, astronomy, medicine, communications, transportation, sociology, business, history and politics. The potential exists for chaos theory to assume a new relevance through its application to the study of international relations and human conflict.

Steven Mann, in his article "Chaos Theory and Strategic Thought", argues that it is important for strategists to understand scientific advances for two reasons. First, these advances may lead to technological developments in the way that quantum theory contributed to the introduction of nuclear weapons. Second, and more fundamentally, he states that "...our view of reality rests on scientific paradigms". He believes that strategic thought has resisted new ideas because it is dominated by a "Newtonian worldview". He describes this as a view which is deterministic and linear, and which sees the world as a mechanism whose behaviour can be predicted. War is also seen in terms of a predictable chain of events. He cites the use of mathematical terms such as "centres of gravity" by Clausewitz, and "geometry" by Jomini, as evidence of this view.1

Mann contends that the complexity of international affairs and the failure of traditional strategic thought to understand the importance of non-state actors such as religions, multi-national corporations and terrorist movements point to the need for a new approach. He says that these complications should not be simply disregarded as examples of Clausewitzian "friction". Rather they are indications that strategists must recognise the limitations of the classical worldview.4 He proposes chaos theory as one way to liberate strategic thinking.

Other writers have employed chaos theory as a catalyst for a new approach. Lawrence Karch proposes that the United States Marine Corps continue to "reinvent" itself as an adaptive organisation as this provides its best prospect for dealing with complex change.5

Having reviewed the relevance of the philosophy of chaos theory, this article will briefly discuss aspects of the philosophy of intelligence analysis.

Traditional Intelligence Analysis

The analysis of intelligence aims to increase understanding of a situation and provide predictions as to its future development. The intelligence analyst is trained to cope with large amounts of information originating from many sources. The analyst's task may be complicated by contradictory information or by deliberate efforts at deception and camouflage. The analyst may also receive insufficient information, but will still often be required to meet deadlines by making assessments and predictions. This set of circumstances is the intelligence analyst's dilemma.

The traditional answer to this dilemma is the reductionist approach to intelligence. A typical reductionist approach is as follows:

• first, a system of data management is imposed upon the collected information (examples of this are the manual card index system, the use of graphic displays on maps and the use of a computer data-base);
• second, information is graded for reliability (this depends upon the source of the information and the existence of corroborating information);
• third, the information is reduced into parts which can be more easily understood (this is seen in the grouping of information by subject matter rather than source);
• fourth, information is studied to identify its most important parts (this process is known as "sorting the wheat from the chaff");
• fifth, the information is searched for indicators of specific future events (these may be indicated by signature activities or equipment); and
• sixth, the information is examined to establish patterns of activity and linkages which will assist in the development of predictions.

This approach was developed through practical experience during World War II and was revised and improved upon in the conflicts which followed. It has been shown to be a successful method of managing information, but like many tried and
proven techniques, the reductionist approach has significant weaknesses.

The emphasis on order which permeates this approach leads to problems. The process of collating the incoming information slows the ability of the system to react to important indicators. An example of this is the tendency of police intelligence analysts to insist on meticulously accurate collation and recording of information to enable its use according to the rules of evidence in future court proceedings. Of course, armed forces analysts may be no less prone to this problem and it has been argued that the "military mind" is predisposed to pedantic processes!

The emphasis on order leads to difficulty when unusual or unexpected information is received. It is difficult to file information which does not fit into the data management system and this may lead to the information being mislaid. Additionally, information which does not conform to the accepted estimate may be disregarded on the grounds that it does not accord with the weight of information on the subject. The opinion of the commander may also overcome the opinion of the intelligence analyst when unusual information is received. Analysts themselves are prone to this problem, particularly when "groupthink" outweighs the opinion of a lone analyst. Unfortunately, the weight of evidence and opinion may lead to a completely wrong estimate. History abounds with examples of intelligence failures in which indicators were disregarded as they did not fit the anticipated course of events.

One answer to the problem posed by the need to process large amounts of information is to hasten the process. The use of artificial intelligence to overcome the slowness of the reductionist approach has received considerable attention in the United States Army. The increase in the speed of processing of information also leads to a reduction in detailed analysis and may lead to vital information being mislaid.

Another approach to hastening the processing of intelligence uses statistical analysis of past circumstances to enable prediction of future events. This approach is known as game theory and continues to receive attention in the fields of wargaming and combat simulation. Its utility as a tool for intelligence analysis is increased if the opponent behaves in a strictly doctrinal or rigid manner. The truism that all wars tend to be different reduces the utility of statistical intelligence prediction. The inability to accurately record all variables which are likely to influence future events also reduces this essentially deterministic approach.

The emphasis on pattern analysis is another area of weakness. The reduction of the battlefield to a series of doctrinal templates leaves the analyst vulnerable to the enemy who chooses not to play by the rules. Intelligence preparation of the battlefield (IPB) is extensively employed by the British and United States armies. It is a tool to assist the analyst in the identification of patterns of activity through the use of graphical templates derived from known and anticipated behaviour. It offers many advantages to the analyst seeking to transform the chaos of the battlefield into an orderly series of patterns. Its weakness is that it may close the mind of the analyst to unconventional developments. Like all tools, it should be employed with care.

Similarly, link analysis, with its emphasis on the establishment of relationships between actors as a method of ascertaining their intentions, has weaknesses. It is prone to the faulty assumption that links only exist if they are detected and if the links to an actor are missed, other information relating to him may be disregarded.

A final area of weakness is the ability of an opponent to manipulate an intelligence system to his own ends. Deliberate deception measures can attempt to influence intelligence assessments with a weight of false information. One aim of such a deception operation is to make legitimate information appear faulty in the eyes of the intelligence analyst.

This article has described chaos theory and its relevance as a philosophical approach and examined the traditional approach to intelligence analysis. It will now discuss the potential utility of the philosophy of chaos theory to intelligence analysis.

The Utility of Chaos Theory

Chaos theory has the potential to free the intelligence analyst from some of the constraints of the traditional approach to intelligence analysis. Intelligence analysis deals with factors which are even more unpredictable than the scientific problems encountered by early chaos theoreticians. The symbiosis of the decisions of all of the human minds, which drive the actions of human society, coupled with the infinite variation of good and bad fortune in all human activity, make definite prediction impossible. The reductionist approach counteracts this uncertainty by searching for patterns and linkages. The chaos theory approach takes a different tack. It recognises that unpredictable human behaviour and chance play such a fundamental role in future events that reductionist analysis is insufficient.
Chaos theory has the potential to enable several variations of analytical technique, but the reductionist approach to intelligence is too ingrained to be removed. For all of its faults, the reductionist approach and its emphasis upon order, remains the tried and tested method of coping with large quantities of intelligence. Nonetheless, a subtle redirection within the search for items of intelligence interest from within the mass of collected information would improve the success of intelligence prediction. Information received by the analyst, which does not fall into an anticipated pattern or fit the known doctrine of an opponent, would receive more consideration. Unusual elements of information may provide the vital clue to an opponent’s intentions that his efforts at deception have been unable to mask.

The re-emphasis upon the consideration of unusual information carries a risk. This risk is that the analyst will become sidetracked from more important information. The analyst will need to use valuable time, which he could use in the maintenance of the intelligence data-base, to consider the meaning of relatively isolated reports. The existence of this risk does not outweigh the potential benefit of achieving accurate predictions.

The chaos theory approach to intelligence analysis includes the concept that the unpredictability of future events may be partially understood through the introduction of multiple ideas. The use of brainstorming sessions to formulate possible opponent courses of action is the best way to achieve this interaction. In these sessions, participants are encouraged to freely contribute ideas and unconventional ideas can be especially valuable. This is because they can further expand the range of possibilities for the analyst who must strive to consider all possible avenues. The risks in this technique are the problems of group-think and the domination of the session by senior or outspoken individuals. When effectively employed, brainstorming sessions are also useful for the generation of possible future scenarios. These then form a catalyst for collection planning and intuitive thinking about an opponent’s intentions.

The achievement of these accurate predictions is, as has been stated earlier, a raison d’etre of intelligence analysis. Chaos theory also influences the approach to the nature of analysis itself. Chaos theory reveals that predictions of future activity based upon imperfect information are generally inaccurate. The reductionist approach is imperfect, but it could be improved with the application of greater intuition by analysts. It is rather unfashionable to discuss intuition but the “hunch” of an experienced analyst may provide more results than exhaustive intelligence collection strategies. The analyst may be persuaded of the efficacy of a report even if it is contrary to the weight of available information. Such inspiration may be the stuff of genius or it may be based upon other professional factors.

The first of these factors is the ability to actually place oneself in the position of the opponent and to strive to duplicate his thought processes. This requires that the analyst empathise with the opponent, rather than simply understand him. Chaos theory demonstrates that small changes at the start of a process can result in major variations in outcome. For this reason empathy with the opponent will contribute to improved predictions. The key question to be asked by the analyst at all times is: “what would I do?” but “what would I do if I were my opponent?” The answers will frequently be different and the latter is likely to be more useful.

As part of the method of empathising with his/her opponent, the analyst must separate himself/herself from the influence of his/her own organisation. Experienced analysts will know that this is harder than it sounds. The intelligence cycle begins with direction from the commander and the military intelligence estimate begins with the commander’s mission. In both cases the analyst is quite properly expected to be cognisant of the requirements of his/her commander. But the analyst must not allow this cognisance to influence his/her consideration of information as it is received. Intelligence analysis is generally “goal driven” rather than “data driven” as the objective is to reduce uncertainty. Intelligence analysis which closely follows this requirement runs the risk that it may take a narrow view of circumstances and be constrained or blinkered in its vision.

One solution would be to quarantine an analyst, or small team of analysts, from the commanders direction and mission. Clearly this method could only be employed at the operational and strategic levels because of the increased staffing implications. Other benefits of such a technique would be the ability of the quarantined group to isolate themselves from friendly force operational planning and to submerge themselves in the culture of the opponent. The danger of the notion of our own cultural superiority, which has contributed to past intelligence superiority, which has contributed to past intelligence failures, could also be reduced by this technique.

The creative tension caused by completion between groups of analysts can also provide benefits. Human nature responds to competition by increasing effort and output. The tendency of some analysts to restrict
themseleves to making uncontroversial and "safe" assessments can be reduced if other analysts are producing more timely or accurate work.

A second professional factor in the success of analysts who are knowingly, or unknowingly, adapted to the potential of chaos theory is the recognition of attractors. As explained earlier, mathematical attractors are recognisable phenomena which result from even complex systems. The philosophy of the study of chaos theory has much to say about the search for "fixed point attractors", "torus attractors", "strange attractors" and "chaotic attractors" and it is beyond the scope of this article to deal with them. The intelligence analyst can perceive the same importance and influence in key actors in the situation being analysed. Examples of these actors are an area of ground with special significance to either protagonist, a charismatic leader, a military unit of particular elan or a particular capability of the opponent. These actors are intelligence analysis attractors and close observation of them often assists in predictive analysis. This observation must be accompanied with caution. The analyst who mistakenly cries "wolf" and jumps to a conclusion based on his belief in a particular attractor may lose the trust of his commander.

This leads to the third professional factor amongst successful analysts who employ intuition: they do not abandon the reductionist approach. They are able to operate both approaches and to gain from each. Thus, for example, the analyst maintains detailed databases and conducts IPB according to his training, but is also willing to follow an intuitive hunch. The two approaches are thus complementary and the skill lies in knowing which to believe when the predictions are contradictory!

Conclusion

Chaos theory was originally developed by scientists who sought to explain the changes and future activity of systems. It has since developed into a philosophical approach and its lessons are being applied to all types of systems. Intelligence analysis will also benefit from its application.

The theory offers more than a mere recognition of the importance of Machiavellian "fortuna" or Clauswitzian "friction". The theory offers a new way of thinking about information because it recognises the fact that apparently insignificant information may reveal the intentions of an opponent. It places greater emphasis upon intuition and empathy than the reductionist emphasis upon patterns and the weight of information. It also contains the concept of intelligence analysis attractors.

Traditional approaches to intelligence analysis should be maintained, but they should be complemented by the subtlety of the chaos theory approach.

Some readers will retain their scepticism about new approaches to intelligence analysis and about chaos theory as a philosophy. This reaction is normal and has often greeted innovation. I would simply ask readers to keep an open mind on the subject and to ponder the notion of chaos theory when confronted with various types of changing systems. The theory is both persuasive and intriguing. The shock of the new can be overcome and accurate and timely intelligence analysis will result.

NOTES
3. ibid, pp 54-56.
4. ibid, pp 56-58.

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Defence – One Organisation
Address to Senior Officer Study Period, Williamstown – 21 March 1995
by Mr R. C. Smith, Deputy Secretary, Strategy and Intelligence

Introduction

In the course of presenting the Government’s recent Defence White Paper to colleagues in the Defence Organisation, I have had occasion recently to share the podium with the then Vice Chief of the Defence Force, Lieutenant General Baker. I have found General Baker’s remarks on these occasions particularly thought provoking and informative. I have been especially interested in his account of what he regards as the five outstanding qualities of the Australian Defence Organisation at this time in its history. These five qualities, as he describes them, are:

First, the strength of our corporate planning processes, which he describes as both coherent and marketable.

Second, the close and effective working relationship between uniformed and civilian personnel in the Defence Organisation.

Third, the progress we have made in the development of joint approaches to command in the ADF.

Fourth, our record in achieving savings and efficiencies in the conduct of the Organisation’s business; no Government Agency, it can be said, has done more in its own operations to support the Government’s micro-economic reform agenda – and, of course, we’ve done that not least because it has been in our interests as an organisation to do it.

Fifth, the outstanding levels of competence and professionalism of our Defence Force – unequalled, pound for pound, among armed forces anywhere.

We could spend the whole period allocated to me this morning discussing any one of these five qualities. What I particularly want to do, however, is to focus on the second of them, that is, the strength of relationship between ADF and civilian members of the Defence Organisation. What I will argue is that, as close and effective as this relationship is, we have to continue to work at it, to improve understanding of our respective roles and contributions and to dispose of a few remaining misconceptions, if we are to get the best value out of it for the Defence Organisation and the Australian Government.

The Past

All of you have been in the Defence Organisation for long enough to know more than me about the history of the civilian/military relationship. Clearly, things have not always been as smooth and amicable as they are now. In my own research for this talk today, for instance, I found that as far back as 1943 General Blarney was complaining formally to the Minister for the Army about problems in his relationship with the then Secretary of the Army Department, and it seems that although both the Solicitor General and the Attorney General became involved, no clear resolution was reached. Friction continued after the war, and in 1951 this led the Government to appoint a committee to examine and report on the issues. But the difficulties continued and led to yet another review, by General Morshead, in 1957. Although Prime Minister Menzies issued a new directive in 1958, most of the recommendations of the Morshead Report were in fact rejected by the then Government, and only introduced subsequently as a result of the report done by Sir Arthur Tange in 1973.

Tange’s reorganisation, though it was an essential step in the process of bringing about the “one organisation” we have today, not surprisingly generated new layers of friction, some of which carried over into the 1980s. In 1981, the Fraser Government appointed a new committee (the Utz Committee) to “review the higher defence machinery”. Its report became the basis of the ministerial directives to CDF and the Secretary which we have today. But still the problem did not settle down, and indeed in some respects worsened in the mid-eighties. Indeed, the problem of differences within the Organisation over the direction of policy was one of the factors which in 1986 led the Minister Kim Beazley, to commission the Dibb Review, which led subsequently to the Baker and Sanderson
Reviews, in paving the way for the organisational structure we have today. These reviews did much for the civilian/uniformed relationship.

Looking back on all of this, it is clear that a range of factors contributed to the awkward relationship between civilians and uniformed personnel. Inadequate definitions of responsibilities, personalities, professional jealousies, jealousies over service conditions, competition for the ministerial ear — these elements, I assume, all played their part in those less happy periods. But so too I suspect did a fundamental lack of understanding between the two groups of their respective roles within, and contributions to, the Organisation.

The Present

Overall, there is no doubt the working relationship between the civilian and uniformed sides of the organisation is better and more effective today than it has ever been. Some of the reasons for that, as I have suggested, are structural.

Where once we had five departments working with the three services, now we have just one. This in itself has reduced the number of interfaces and created greater interdependencies — and incidentally enabled us to talk of our “one Organisation”.

This “one Organisation” is headed by two persons of equal status, the Secretary and the CDF, with a top-management team comprised in addition of eight Program Heads — four civilian, four military.

The higher committee arrangements reflect this structure — the DPMC is a fully integrated forum for deciding upon resources issues, and COSC now meets as often as not as augmented-COSC.

Every program includes both uniformed and civilian personnel. In my own program, for instance, I have 800 uniformed personnel and 980 civilians. Across the board, nearly 60 per cent of the 20 000 or so civilians in the organisation are in fact employed in the services programs, that is, Forces Executive, Navy, Army and Air Force.

Within these structures, things have come quite a long way in the last 20 years. I’m told for instance that Sir Arthur Tange, to force the pace of integration, designated a number of “either/or” positions, positions which should be filled alternatively by civilians or uniformed people. We don’t need to formally designate such positions any more: it happens — the Director DIO position, for instance, is one which could be filled by either a military person or a civilian: it is not designated, we just try to select the best available person. “Double hatting” was introduced, I understand, in order to ensure that senior staff accepted that they had responsibilities to two parts of the Organisation — again, that is no longer necessary, though we do of course retain a number of “double hatted” positions where the job concerned genuinely works for two parts of the Organisation.

At the administrative level, there was a time when military officers did not have full financial authority — every position with a delegation had a shadow “concurrent position”, the occupant of which in effect had to countersign for the military officer. That went about ten years ago.

At the policy level, a new set of dynamics has evolved and a similar process of integration has occurred. For my own part, for instance, I would usually, in the course of a working day, have at least one formal meeting with VCDF and would normally see him informally more frequently — more often, certainly, than I would see any of my civilian colleagues at that level. Each of us often chairs meetings attended by the other, and it is not unusual for us to co-sign submissions to the Minister — something which, I’m told, doesn’t happen often in many other defence organisations. Moreover, VCDF participates with deputy secretaries and division heads from PM and C and DFAT in regular meetings of the Strategic Policy Coordination Group on international policy and security issues — a reflection of the civilian/military relationship not only within the organisation, but more widely in the Government.

All of this has happened for a number of reasons. First, through legislative and organisational changes and various processes of review and restructuring, Government leaders have forced it to happen. Personal dynamics have played a big part in this. Some strong personalities have recognised what is needed and made it happen — two ministers, Kim Beazley and Robert Ray; two CDFs, General Gratton and Admiral Beaumont; and our present secretary, Tony Ayers — to name a few. Their personalities and influence are reflected not only in our own organisation and structure but also in its tone and character.

As well, our changing strategic circumstances have also contributed to the evolution of a better integrated Defence Organisation. When we operated in a strategic framework provided by great and powerful friends, the business of advising Government was generally more straight-forward. Arguably, self-reliance has required us to face harder choices and pursue more complex policies which in turn have required closer involvement of Defence with other areas of Government Policy advising and more coherent civilian/military policy development processes.
Some basic facts of our changing way of working have also helped bring about the closer civilian/military relationship we now have. With fewer resources available now relative to the tasks to be performed, we have simply had to work smarter – and that has meant working together more effectively and fighting less over turf. Moreover, just as the changing nature of the technology of warfare – especially, but not only, in the area of communications – has led to a greater need for joint command and control arrangements in the Armed Forces, so changing technology has led to greater pressure for jointery between civilians and uniformed personnel.

New approaches to management have also helped the process. I refer particularly to the introduction of Program Management Budgeting (PMB) into Defence in the late 1980s. With financial responsibility fully devolved to program managers, that “concurrence position” practice to which I referred earlier would simply not be possible.

As well, there are of course a good many former Service personnel working now as civilians in the Defence Organisation, from the Band Two level downwards. At the same time, a healthy number of Defence civilians serve in the Reserves. As a result, the organisational, strategic, technological and personality driven changes have been complemented by better personal understanding.

Roles of Civilian and Uniformed Personnel

Yet, for all that, there is I think still some work to be done on the civilian/military relationship. My perception is that there are still some inadequate understandings of each other’s roles in the Organisation and of the necessary cultural differences between the two groups; and that some myths or misunderstandings also persist and need to be disposed of.

On the question firstly of fully understanding each other’s roles, it is clear enough what the uniformed side brings to the Organisation. It brings professional competence and expertise in the preparation and use of military capabilities, and a particular set of strategic understandings. This in turn requires high levels of organisation, discipline and military education and training, requirements which in turn define the character and ethos of a military force.

It is probably less clear, especially I suspect to some of our uniformed colleagues, what civilians bring to the Organisation. Let me attempt to summarise the main elements of the civilian contribution:

**First**, civilians can bring skills derived from specialist training in a wide range of fields – for instance, in financial management and accounting and audit functions; in quantitative analysis of the kind used for example in force structure or capability deliberations; in science and technology; in particular areas of policy advising, such as country specialisations and disarmament issues; and in the legal area.

**Second**, civilians can bring the sorts of skills and knowledge which derive from experience of the kind which is not available, or not readily available, to uniformed personnel. Skills in international policy development and advising, and in the practice of international relations, are one example of this.

**Third**, civilians can bring bureaucratic skills – the skill that is of working effectively in a complex intra-governmental environment. Military personnel are accustomed to working in environments which are largely self contained and the relationships of its parts well defined. Government tends to be different from this and working the government agencies, with their interdependencies and their peculiar power relationships, does require a different kind of experience.

**Fourth**, civilians can bring diversity to decision making and advising on defence issues. Expertise on defence issues – whether in relation to strategic issues, military hardware and technology, or engineering – is not limited to members of the Armed Services. As well, there are inevitably within the Armed Services pressures which produce a fair degree of uniformity. Government, in making decisions, wants different kinds of advice. One way of getting this is to draw on personnel who have appropriate knowledge or experience but a different professional culture. It might for instance be a culture derived from experience in industry, in academia, in diplomacy or in other parts of the bureaucracy. The point is not that similar skills are not available in the Services, but that different ways of looking at issues must also be available to Government decision makers.

As a senior ADF officer put it to me when we were talking about this subject, civilians tend to be better at asking unpredictable or unusual questions. They may be a bit better too at seeing things as others outside the Organisation would see them.
Fifth, civilians can provide continuity in both administrative and policy areas. They can provide highly specialised staff who remain in relatively narrow fields for years at a time, and thus leave the Defence Force with the flexibility and mobility it needs to meet its other demands.

Of course, not all defence organisations have the same sort of ratio of civilians to uniformed staff as we have – that is, about one civilian to about three military personnel, excluding reserves. And arguably, many of the skills I have attributed to civilians could be acquired by uniformed personnel if they were given the same training and experience. But two particular factors lead us, and countries like us, to take the approach we do. One is cost – the unit cost, that is, of personnel. Increasingly, in Australia as in other industrialised countries, this is an important factor. The fact is that, for all the reasons I have indicated, uniformed personnel are more expensive per unit than civilian personnel. By way of example, our own figures indicate that, when all the overheads, including salaries, are taken into account an officer at colonel level costs about $23,000 per year more to employ than a public servant at the comparable level.

For all modern Defence Forces, costs are rising – new capabilities are almost inevitably more expensive to acquire than those they replace, and operational costs are almost invariably greater too for new or replacement capabilities. Above all, unit costs of personnel are rising as more complex equipment and systems demand more skilled personnel. There is thus – in Australia as elsewhere – a sharper focus than ever on ensuring that uniformed personnel are not doing jobs that civilians could do. That of course is one of the principles of our Commercial Support Program (CSP), though there are also others.

The second factor which has lead Australia to take the approach we have to ensuring a civilian/military mix in our Defence Organisation is the demand of Government for diversity in the advice it receives. In support of this contention, I can do no better than to quote a former minister, Kim Beazley, who said, in a letter of 3 November 1987 to the Chairman of the Parliamentary Joint Committee on Foreign Affairs, Defence and Trade

“What I require from the Defence Organisation is comprehensive and objective advice on all pertinent aspects of an issue, and an exposition of the alternative courses open to Government with the arguments for and against each. From my experience as Minister, I do not conceive of such advice being available from the Defence Force or from the Public Service Department of Defence.”

Mr Beazley went on then to say that he believed this view was shared by all of his predecessors back at least as far as 1951.

These views on the need for diversity and balance, incidentally, are neither recent nor unique to Australia. In reading on the subject, for instance, I found quite similar remarks attributed to Admiral Mahan, the 19th century American strategist and naval historian, and to President Eisenhower.

“Cultural” Differences

It is self-evident that the very different natures of military and civilian service produce different cultures, and it is important that those differences be recognised and understood if the two groups are to work together effectively. To mention just a few of these differences, civilians are, for instance, generally more readily able to tolerate, and even be comfortable with, unclear lines of command, divided authority, and open-ended guidance or ambiguous instructions. They also tend to be willing to offer judgements and opinions on the basis of less hard data than their uniformed colleagues, and to accept that outcomes can’t always be readily predicted or easily influenced. Again, the question of “ownership”, so important to military commanders who very understandably want to “own” or have command of the assets needed to do the tasks for which they are responsible, is much less important to civilians, who are generally more comfortable about being dependent on others to deliver results. Approaches to careers and service are also, inevitably, different and so of course are conditions of service and expectations from the service of which they are members.

Misunderstandings

Encouraging better understanding of these essential differences between civilian and uniformed personnel and their respective cultures is necessary to ensuring a constructive relationship between the two groups. But understanding each other’s roles and cultures is only part of what is needed. We must also counter misunderstanding of myths within each group about itself and its own role. Let me tackle a couple of the more persistant of these misunderstandings. If in doing so I seem to present caricatures, then perhaps that can be put down to the peculiar sensitivity of one
who has come as a very sympathetic outsider to the organisation.

On the civilian side, firstly, it seems to me that there persists a misunderstanding among some of our colleagues about what “Civil Control of the Military” means. For some, it means that civilians exist in the Organisation to somehow “control” the Defence Force, that our uniformed colleagues can’t be trusted, that without civilians they would exceed the bounds of responsibility. The notion of “Civil Control of the Military” goes back of course to seventeenth century England. It means that the Military Forces should be responsible to the Government of the day and thus to the elected parliament. It *doesn’t* mean that civilians exist in the Defence Organisation in order to “control” the Defence Force. It is essential for there to be parliamentary control, but Defence civilians are *not per se* the vehicle for this – that is what Parliament and Ministers do. The persistence of this mistaken view, and the patronising way in which it is sometimes stated or implied, clearly gives rise to ill-feeling among our uniformed colleagues, and understandably so.

But equally there are myths or misunderstandings among some in the ADF about their role and the place of their organisation in the governance of Australia. I sometimes hear things which suggest a belief that the ADF is not just “non-political” but also not a part of the structure of government responsible to the government of the day. The idea seems to be that the ADF is responsible to the nation or the crown, that is, to some higher god than the elected government of the day. The corollary of this is a view that civilian public servants are somehow considered more “political” in the partisan sense, and even at times less perceptive about the national interest and more willing to compromise on it.

The issue here, in relation to these myths or misunderstandings I have spoken of on either side of the civilian/military relationship, is the constitutional and legislative relationship of the ADF to Government. The best source of understanding of this issue remains, in my view, the address which the then Governor General, Sir Ninian Stephen, gave to the JSSC on 21 June 1983. This address was apparently inspired, incidentally, by concerns which Sir Ninian felt about some comments made at the time about the nature of the relationship between the ADF and the Governor General as its Commander-in-Chief – comments which, appeared, in turn, to have had their origins in debate about the dismissal of the Whitlam Government in November 1975. If you have not read Sir Ninian’s address, I commend it to you.

Sir Ninian spoke of the role of Governor General as Commander-in-Chief of the Australian Defence Force, but made clear the limits to the authority of that role. This he did by reference to the contextual background against which the Constitution was drafted, and the evidence from the constitutional conventions about what was intended by the Commander-in-Chief provision, namely, that that command, like his other powers, could be exercised only on the advice of the responsible minister of the Government.

This is of course the position which is provided for quite explicitly in the Defence Act, namely, that “the Minister shall have general control and administration of the Defence Force”, and the powers vested in the CDF, VCDF, CNS, CGS and CAS, and jointly in the CDF and the Secretary, “shall be exercised subject to and in accordance with any directions of the Minister”. It provides also that it is the function of the CDF and the service chiefs to “advise the Minister in such manner as the Minister directs”. It is also clear from the Act that when the Governor General approves military promotions and issues commissions, he does so on the advice of the Minister.

None of this will be news to anyone here, but it surprises me how often I hear echoes of misunderstanding about it in the course of doing business around the Defence Organisation. It is an issue which could, if it’s not understood clearly, get in the way of a smooth relationship between civilian and uniformed personnel.

In summing up what I have said so far, let me make quite clear that I am *not* saying the differences of views between civilian and uniformed members of the Defence Organisation should not or will not exist in the future. Differences are inevitable, and indeed essential if the Government is to receive that diversity which it wants in advice of defence issues. But what is important is that such differences be based on a fair representation of the responsibilities of that part of the Organisation which the persons concerned represent (for example, Army or RFP, Navy or FDA) *not* on whether the person expressing the view wears a uniform or is a civilian. This is what the government wants of us — diversity, balance, creative tension if you like, but *not* tribal disputation.
The ADF in Government Decision Making

In the context of this discussion of the relationship between civilians and ADF personnel and of the place of the Defence Force in government, there are two remaining points which are worth consideration.

The first is a fairly simple one, namely, that the boundaries between those areas which were once regarded as the prerogatives of either civilians or uniformed personnel to advise upon have become increasingly blurred, and will continue to blur. Increasingly, the constraint on the right to advise will not simply be whether the adviser is uniformed or civilian, but rather what he or she can bring to the issue in terms of knowledge or experience. Just as there are for instance civilians with legitimacy and real credibility in the analysis of capabilities issues, so there are uniformed people with real expertise in areas of international policy (including for example, peacekeeping, and regional relationships). And as civilians can understand and contribute to debate on military processes and organisational needs, so military officers can offer a lot in terms of government decision making processes. It is, I suppose, in the relationship between my Strategy and Intelligence Program and the Forces Executive Program that I see this convergence most clearly, but I know that there is a good bit to it also in the Acquisition and Logistics Program and other areas of the Organisation.

The second point I want to make here is about the nature of government decision making processes in the event of a crisis involving the use, or potential use of armed force. From the point of view of the ADF, and indeed of any defence force, the ideal situation when a crisis reaches the point at which force needs to be used would be for the government to define its objectives on the basis of advice from its military commanders about what is achievable, and then to simply tell the commanders to get on with it. But in reality this is not what happens, for a number of reasons. One is that the government is responsible and accountable not only for the outcome but also for the way the objective is pursued and for the things that occur along the way. Another is that in almost any operation there will be costs and risks, and ministers will want to feel that they are doing as much as they can to reduce those costs and risks. Governments want to win when they get into fights, but in situations short of total war it would be rare for them, I think, to want to win at any cost.

It is also the case that merely planning and preparing for a military operation is a significant policy step, especially when it has to be done in ways that are publicly evident. A range of government ministers and their departments or agencies will therefore want to be involved even in the planning stages.

It was with this mind that the Strategic Policy Coordination Group, or SPCG, was constituted in 1988. Comprised of one Deputy Secretary and one Division Head each from PM&C, DFAT and Defence, and VCDF, the group was mandated to do two things. First, it was to ensure effective consultation between departments on strategic and security policy issues in the normal course of events. Second, it was to serve as a mechanism for providing coordinated advice to Government on key issues in the event of an international crisis involving Australian interests. VCDF, incidentally, was originally only to join the group in its second or crisis management manifestation, but in practice he now attends most meetings.

While the SPCG was born out of some particular experiences in the eighties, its time had come in a wider sense. Clearly, in the changing world we had developed our own national security approaches and the ADF had to be part of the team. Equally clearly, no major task in the area of international security was going to be, any longer (if it ever had been), strictly military in character.

I have explored this final issue a little in the context of talking about the civilian/uniformed relationship because I think the two issues are very closely related: that is, an understanding of the way in which civilians and uniformed personnel work together, and of the place of the Defence Force in government decision making processes.

Conclusion

In the course of doing my job I get to see a lot of high level visitors from other defence organisations. I'm always interested to know what has particularly impressed or surprised them about our Defence Organisation. From the views they express, I can learn a bit about our Organisation.

Two offerings from recent visitors have particularly interested me. One was an observation from one very senior visitor, who said he was particularly struck by the fact that so many of the briefings he and his party received while they were in Australia were given by NCOs: apparently, that
doesn't happen in many other countries. It certainly speaks well of the professionalism of the ADF.

The second was from another senior visitor, who remarked at the end of his visit here that we were probably unique in the world in our development of joint civilian/military management of the Defence Organisation. He said, for instance, that the kind of round table discussion he had with VCDF and I where senior civilian and uniformed officers also participated could not have happened in very many other countries. That I think is an accolade in which we should take considerable pride. It reflects a situation which we should work hard to preserve and improve upon.

R.C. Smith
Williamstown
21 March 1995

Mr Smith was appointed First Assistant Secretary, Pacific, Africa and Middle East Division, in the Department of Foreign Affairs and Trade in 1989, and as Deputy Secretary of that Department in 1992. He has served on secondment to the Department of Defence, as Deputy Secretary, Strategy and Intelligence, since April 1994.

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Influenza Vaccination — A Useful Inclusion in the Preventive Armaments of the ADF?

By Major S.J. Kitchener, RAAMC

Influenza is an illness caused by orthomyxoviridae. The epidemiology, or behaviour in populations, of the disease indicates a tactical importance for the Australian Defence Force. Of further relevance is that the disease is reasonably predictable and preventable, therefore warrants attention by military planners.

Typically, the illness is an upper respiratory tract infection occurring in epidemics. The incubation period, defined as the time between entrance of the organism into the body and the first symptoms of disease or ability to pass on the organism, is one to two days.

As is familiar to many, the symptoms of influenza include chills, tiredness, fever, muscular aches, prostration and sore throat. The symptoms persist for about three days. Complications are rare, though notable, including secondary infection of the lungs and brain (pneumonia and encephalitis).

Transmission of the influenza virus is by airborne droplets from infected persons for the time soon after their infection to two days following the cessation of symptoms. There is a large reservoir of influenza among animals, causing local control to be difficult, though, on a strategic scale, epidemics of influenza in Australia are recognised to be usually transmitted from other parts of the world, commonly from the near north, as was the case with the infamous epidemics such as the “Hong Kong 'flu” in the decade following 1970.

The predominant influenza in the last Australian winter season was a virus first described in China in 1992, so called “A/Beijing/32/92”\(^1\). This virus, A/Beijing/32/92, is a direct descendent of the Hong Kong 'flu after a series of “antigenic drifts”, which are minor mutations or changes to the “spots” on the surface of the beast. The “spots”, or antigens, are the means of recognition used by the immune system in the body to direct antibody and cellular responses, or the means by which the body destroys intruders such as the influenza virus. The Hong Kong 'flu itself was an “antigenic shift” from a previous Influenza A virus, that is, a major mutation or change in the appearance of the virus occurred, which found many people with minimal immunity to respond to the “new” agent.

Vaughan acknowledges 13 “pandemics” from 1510 to this century. As discussed above, it was recognised that the pandemic referred to as the “Russian “flu” of 1889/90 originated in China following the great floods in that region during this period\(^2\). The first recorded episode of a probable antigenic shift this century was the Influenza pandemic of 1918/19 associated with the closing stages of World War I. It is estimated that approximately 15 million people died from this illness across the world between May 1918 and May 1919, compared to approximately 8 million casualties from the War.

During this world-wide epidemic, influenza certainly assumed strategic importance to the military. Such antigenic shifts are not common; however, antigenic drifts appear much more frequently and may assume tactical importance for Australian military deployed in terms of operational ineffectiveness. The population impact of a new serovariant of influenza from an antigenic drift is less as the degree of “herd” immunity retained against the virus is greater than that retained to a virus having undergone an antigenic shift. However, of tactical relevance on a unit and formation level, is the attack rate over a period of five weeks which will range between 10 and 50 per cent, depending on the health of the unit or formation\(^3\). Deployments to tropical regions are likely to experience greater effects from influenza outbreaks as observed in populations in these regions. This effect observed in tropical environments is thought to be from either increases in the virulence of the virus or decreased host resistance\(^4\). Of further tactical relevance to operational effectiveness is the rate of onset of the illness following an exposure to the causative organism, in the order of hours.

Symptoms of the illness are disabling for all affected, in particular the disabilities associated with infection and disease in certain specific combatants. Aircrew contracting influenza are generally not fit to fly for the period of the illness for several reasons, including the possibility of trapped gas problems associated with barometric changes affecting organs such as sinuses, lungs and ears. The general stamina of these combatants will be reduced along with cognition and consequently judgement. Divers are
simply affected for performance of diving duties. On a broader scale, all those operating with NBC protective masks will be significantly affected by the presence of influenza with the problems caused by prostration, fatigue and fever. These combatants will be more susceptible to the effects of dehydration and heat stress.

The condition on influenza is preventable to a degree by vaccination. The CSL vaccine content this season contains antigens to generate immunity to A/Texas/36/91/H1N1, A/Guangdong/25/93/H3N2, and B/Panama/45/90. It is anticipated that the Texas serovariant (new “strain” of influenza) will appear this year having been identified four years ago in the northern hemisphere. This virus is a direct descendant of the Hong Kong agent and has the potential to manifest as an epidemic. As the antigenic drift is identifiable in areas well north of Australia, vaccination may be both timely and useful. The use of the vaccination arises particularly as the serovariant passes through areas relevant to many ADF deployments, viz. South East Asia, and the migration of the new virus is sufficient to effectively vaccinate personnel.

The question then arises of the efficacy of the vaccine in preventing operationally significant illness. The National Health and Medical Research Council recommends influenza vaccine for several groups in the community, not including soldiers. The elderly, infirm, nursing home residents, immuno-suppressed and health care workers are the groups recommended, though it is generally not refused to those that request it. Efficacy in nursing homes has been shown to be as high as 80 per cent for staff and residents (relative risk = 0.13) against developing the clinical illness. On a more general population, 80 per cent seroconversion (development of appropriate antibodies) has been found using sub-unit vaccines. More readily available vaccines against influenza will protect approximately 70 per cent of those vaccinated within two weeks of vaccination and this protection will last for one year. Vaccines against Influenza A confer a relatively high degree of protection against illness in younger healthier people, certainly higher than in older people, and high relative to other vaccines.

In conclusion, the occurrence of influenza appearing in a deployed force is a real possibility, may carry relevance in operational effectiveness of the unit or formation and is reasonably preventable. Protective armaments against several biological hazards are currently employed by the ADF, influenza would be a reasonable inclusion in this group.

NOTES

6. Vaughan, W.T., Influenza, an epidemiological study, American Journal of Hygiene, 1, July, 1921.

Major Scott Kitchener is a Military Physician in the RAAMC. He joined the Australian Defence Force in 1985 as an undergraduate medical officer, studying at the University of Queensland, the RAAF Institute of Aviation Medicine, the RAN School of Underwater Medicine and the School of Army Aviation, and completed a Masters in Public Health through Curtin University. This article is based upon research conducted at the School of Army Health and during his final year of specialty training, however, reflects only personal opinion.
The Army and Social Change in Remote Aboriginal Communities

By Captain D.M.F.X. Millie, RA Inf

"I know I am a stranger to them, and always will be: but I cannot believe them worse, any more than I could change their ways."

In 1981, the ADF recognised the importance of remote Aboriginal communities to the defence of Australia when it embraced the concept of the Regional Force Surveillance Unit (RFSU). For the first time since World War II, Aboriginal men were enlisted into mixed race, regional sub units: selected by their elders to represent their community. Fourteen years later, remote Aboriginal communities, particularly the Arnhem landers, hold the Army in very high esteem.

However, in the light of the low community self-esteem within remote Aboriginal communities, there exists a social requirement for the ADF to spearhead a reappraisal of the remote Aboriginal’s traditional culture. The Army, by its cut and dry laws, its hierarchy and intrinsic kinship with the bush, has a unique standing in all remote communities from which it can promote the return of the cultural self-esteem of the Aboriginal elders, youth and women.

Aim

The aim of this article is to explain how the Army, by merit of its high social standing among Aborigines, has the ability to promote social change to rejuvenate the traditional Aboriginal culture.

The Present Situation

Over the past century the Aboriginal culture has been pulverised by successive European attempts to civilise the traditional Aborigine to the ways of the white man. The missionary system, the policy of relocating half-caste children and the present social benefits system have all contributed to the present-day squalor, general ill health and low self-esteem that exists in most remote communities today.

Lack of community self-esteem is a product of the loss of cultural traditions. Symptomatic of this loss is a tendency to a high crime rate. A case in point is the experience of Groote Eylandt. With an Aboriginal population of approximately 1300, the island is made up by three communities: Angurugu (850), Umbakumba (350) and Bickerton Island (100). As at the end of May 1995, 39 of the adult population were in prison, on probation or serving community service. For that month Groote Eylandt Aborigines accounted for 10 per cent of the inmates of Berrimah Gaol. The island has one of the highest crime rates in the world. According to the island’s Community Corrections Officer, the adults treat their gaol term "as a welcome break from the boredom of community life in Angurugu."

These statistics and the Corrections Officer’s admission are bewildering, especially in the light of the efforts of the Aboriginal and Torres Strait Islander Commission (ATSIC) and the departments of Local Government and Aboriginal Affairs. Why have these organisations failed to create stable societies?

The answer lies in their approach to Aboriginal affairs. Remote Aborigines are still in a quasi missionary era. Schemes promoted by ATSIC and government departments are white man’s methods at solving a problem that is about the Aboriginal culture. ATSIC’s Community Development and Employment Program (CDEP), for example, is essentially another means for issuing unemployment benefits and disguising national unemployment levels.

The situation is that government and ATSIC policies exacerbate the problem by not allowing Aboriginal communities to fend for themselves. White administrators, European laws and unemployment benefits all serve to destroy the traditional social systems. A new scheme is required, one that recognises and promotes the social psychology of the Aborigines. Enter the Army.
The Importance of the Army

The Army has unique characteristics that are admired by remote Aboriginal communities. The Army's endeavours to relate itself with the bush is an obvious characteristic. However, there are more subtle, psychological reasons for this attraction. The Aboriginal culture has a warrior tradition and as such excites the nature of the Aborigine. Furthermore, the aloof and yet authoritative nature of the military system, and the associated system of cut and dry laws, is perceived as akin to their own traditional community principles.

Indeed, remote communities appreciate the significant role their soldiers play in the defence of their regions. Furthermore, military skills gained through service, such as the day-to-day maintenance of a patrol vehicle, may also be passed on to others in normal community life.

However, the RFSU does not seek to promote or develop the traditional warrior skills of the Aborigine. With the degradation of their traditional society and individual bush skills, the Aborigine's ability to contribute to the defence of the North is seriously hampered. The rejuvenation of this capability, then, is also important to the defence of Australia. There is a need for the Army to instigate and direct a social scheme to promote the traditional aspects of the remote Aborigine's culture. For, as Rhys Jones and Betty Meehan concluded in their analysis of the significance of the Arnhem Land Aboriginal to the defence of Australia entitled The Arnhem Salient, "...we invisage the possibility of considerable cooperation with mutual benefit in this field."

The Scheme

The scheme would involve highly trained male and female soldiers, specialists in specific military arts and trades, living within a community with a mission to engender interest and develop skill in specific traditional and modern aspects of community life. The objectives of the mission would be to:

a. engender voluntary participation;
b. develop skills in certain individuals; and
c. provide advice to certain individuals to develop their leadership to maintain continuity of the scheme.

The scheme would be worked through the traditional elders, thus promoting the concepts of the traditional leaders. The programs would be wide ranging, including modern as well as traditional skills.

Obvious areas would include vehicle maintenance, carpentry, agriculture, warrior skills, basket weaving, medical training and administration.

Because of its subtle nature, the scheme would take a long time to achieve results. The soldier would need to devote a period of time to gain gradual acceptance within the community and to assess the natural way to introduce the program. Indeed, the soldier would have to immerse himself/herself in the culture of the community and go to great lengths to achieve acceptance. Dr Donald Thompson, wartime leader of the Northern Territory Special Reconnaissance Unit, trained himself to walk bare foot in order to maintain his authority.

The soldiers selected to implement the scheme would form into teams, along similar lines to a Guerilla Warfare (GW) cadre. In many ways these teams would follow the GW guidelines layed down by T.E. Lawrence for the handling of Arab tribesmen during World War I. In 1917, Lawrence produced a pamphlet entitled Twenty Seven Articles in which he provided guidance for advisers newly posted to the Arab armies. Many of these articles could be transposed to the cadre staff's situation. Of particular relevance to the raison d'être of the scheme is Article 15 which states:

"Do not try to do too much ... Better the Arabs do it tolerably than you do it perfectly. It is their war, and you are to help them, not to win it for them. Actually also under the conditions of Arabia, your practical work will not be as good as perhaps you think it is."

Gains

The gains from such a scheme will be threefold. Firstly, the scheme has the potential to improve the remote community's ability to contribute to the defence of Northern Australia. Traditional individual warrior skills would be developed that would improve the soldier's operational effectiveness within an RFSU. Furthermore, the scheme would raise the consciousness of the remote Aboriginal community to the defence of Australia.

The second gain, is that the Army would be able to transpose the skills and experience gained, implementing the scheme in its commitments to the United Nations (UN), in Third World communities with conditions resembling remote Aboriginal communities.

The most significant gain, however, would be social: that is, the rejuvenation of the traditional remote Aboriginal culture and society. Aborigines would once again be leading and managing their
NORFORCE personnel during a Training Course
communities, by themselves. Freedom from the social benefit and royalty schemes that retard economic progress would also be achieved.

**Conclusion**

It is a disgraceful fact that social conditions in remote Aboriginal communities resemble those of the Third World. Government and ATSIC attempts at social welfare solutions have failed to remedy the situation, and will continue unless the core issue is faced; that of social change. Because it appeals to the warrior and social perceptions of the Aboriginal and because it already possesses the necessary resources, the Army is the ideal agency to promote the rejuvenation of the traditional Aboriginal culture and society.

Detailed research and planning, Army/Aboriginal cooperation and the support of the Australian people would be essential before implementation. The success of the scheme would take time, perhaps a number of years. However, it is this author's considered opinion that the Government and ATSIC are incapable of rejuvenating traditional Aboriginal society. That Australians can tolerate the conditions in remote communities is reprehensible and a disgrace to the Australian spirit. Furthermore, as Jones and Meehan state:

"By respecting their traditions and jointly working towards, rather than against, full emancipation, we can ensure a lasting contribution from the Aboriginal people of Arnhem Land to the security of the entire Australian nation."

**NOTES**

2. A Hale, Interview on 5 Jul 95, Groote Eylandt Community Corrections Officer.
5. *ibid*.
9. *ibid*.

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*Captain Millie graduated from RMC in 1988, after completing a Bachelor of Arts Degree at the Australian Defence Force Academy. He has since served in Infantry regimental appointments at 1RAR and NORFORCE. He is currently a liaison officer with ICLU, based in Darwin.*
Close Air Support: Vietnam Dinosaur or Key Defence Capability?

By Squadron Leader A. J. Quaife, RAAF

"Future battles and campaigns have the potential for extending over greater distances and continuing longer than any military operations of the past. Victory in such battles will demand complete unity of effort and thoroughly synchronised air and ground action."

Introduction

The manual of air power doctrine of the Royal Australian Air Force (RAAF) describes three fundamental air campaigns. They are: Control of the Air, Air Strike and Air Support. According to RAAF doctrine, these campaigns are interactive and should be pursued concurrently where possible. Various air roles, which encompass the actual conduct of combat, will comprise air campaigns. Of these, Anti-Surface Forces' roles are expected to be conducted in parallel with the campaign for control of the air. In the land environment, Anti-Surface Forces' roles are Battlefield Air Interdiction and Close Air Support. Close Air Support (CAIRS) is defined by the Australian Defence Force (ADF) as "air actions against hostile targets which are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces."

Air Contact Officer (ACO) and Forward Air Controller (FAC) training is a visible commitment made by the RAAF to provide Close Air Support for Australia's ground forces. In early-1994, the RAAF commenced the transfer of a small number of Pilatus PC9/A aircraft from the basic flying training role, to replace ageing Winjeel aircraft in the FAC training role. The RAAF has never operated a dedicated aircraft type considered to be operationally capable in the FAC role. Winjeels, basic flying training aircraft introduced as FAC trainers in 1968, have little capability to perform an operational FAC role. Similarly, PC9/A aircraft have little operational capability.

Introduction of PC9/A aircraft will maintain a capability to train for a concept of CAIRS operations that was developed during the Vietnam conflict. Between 1966 and 1971, a total of 33 RAAF fighter pilots served in South Vietnam conflict as Forward Air Controllers. Experience gained in Vietnam has defined ADF doctrine for CAIRS. This doctrine is characterised by techniques and tactics developed for the enemy, fielded equipment, and the environment of the war in Vietnam. Under ADF doctrine, fighter/ground-attack (FGA) aircraft will be tasked to attack hostile targets close to friendly forces. Attacking aircraft will be under direct control of a FAC, probably operating from a slow, fixed-wing aircraft. The FAC, operating with a ground formation from a forward location, will be in direct contact with both ground forces and attacking aircraft. Target information will be passed to pilots of attacking aircraft by radio, using a standard "nine line brief." Target positions will be marked by smoke and, to ensure safety of friendly forces and to maximise effectiveness, the FAC will control ordnance release.

While ADF operational doctrine for CAIRS has changed little in the past 30 years, weapons and capabilities of the RAAF have progressed significantly. In this 30-year period, RAAF attack capabilities have progressed from level bombing techniques, reminiscent of World War II, to delivery of precision guided munitions from platforms that employ highly accurate, automated systems for weapons release. The initiative to sustain FAC training by introducing PC9/A aircraft to the role, shows a commitment to CAIRS. However, some reservation towards the CAIRS role is evident within the RAAF. For example, in 1989, a joint working party on the future of air control arrangements for CAIRS, recommended that the RAAF divest itself of the day-to-day working responsibility for FAC by transferring doctrinal responsibility for CAIRS to the Army. This recommendation was not adopted. Reasons for reluctance towards the CAIRS role are clearly stated in the RAAF's manual of doctrine, The Air Power Manual. This publication supports the role but points to such limitations as:
a. sufficient tactical aircraft seldom being available to meet all air tasks;
b. multi-role F/A-18 and F-111 aircraft would probably be engaged in competing priorities of counter air and strike operations;
c. physical limits of terrain, visibility, communications, ground fire, proximity of friendly forces, ordnance type, and aircraft type; and
d. the vulnerability of CAIRS aircraft to modern, easily acquired, shoulder-launched Surface to Air Missiles (SAMs).

Hence, a dilemma exists between a fundamental air power role and limitations of traditional CAIRS techniques.

**Vulnerability to Ground Fire**

Aircrew vulnerability to small arms fire and a variety of low cost, man-portable SAMs is a frequently cited argument against the CAIRS role. In this argument, preservation of the resource (expensive, multi-role aircraft) assumes greater importance than the tactical tasks at hand. The ADF clearly cannot afford to waste aircraft assets in any future conflict. But why should the loss of an aircraft engaged in close support of ground forces be any less acceptable than the loss of the same aircraft engaged in other roles? Although the modern battlefield environment poses a significant threat to aircraft, modern air-to-air missiles and strategic defences make Counter Air, Strike and Interdiction roles potentially more deadly.

Fear of attrition, together with other considerations, leads to the proposition that low-cost training aircraft (such as the Aermacchi MB-326H or the new Lead-in Fighter
d) could be employed in the CAIRS role. This proposal contradicts the notion that more expensive assets are vulnerable in the battlefield environment. The proposal is based on an assumption that credible land operations described by Australia’s strategic guidance represent a low threat to supporting aircraft. If a low-cost, training aircraft is expected to operate, and survive, in the anticipated CAIRS environment, more capable ADF aircraft must also be able to operate without risk.

The high costs of F/A-18 and F-111 aircraft reflect the capability of these weapons systems. Each of these aircraft is designed to attack ground targets with high accuracy in a hostile environment. These aircraft have very high performance and are equipped with electronic counter-measures and warning devices. Both F/A-18 and F-111 aircraft weapons systems can designate targets and accurately deliver weapons from outside the range of man-portable SAMs and small arms fire. As described by Group Captain P.J. Criss, implications of this capability for support of land forces are poorly understood by ADF commanders. 10 A significant tactical implication of this capability is that such weapons deliveries are not compatible with CAIRS procedures developed for weapons and aircraft of the Vietnam era.
CLOSE AIR SUPPORT — VIETNAM DINOSAUR OR KEY DEFENCE CAPABILITY

Degree of Difficulty

In conventional tactics for CAIRS missions, attacking aircraft will hold in a secure area and receive target information from a FAC. When ready, aircraft will proceed to the target and deliver requested ordnance. Because the FAC will mark target positions with smoke, and coordinate the attack with other friendly fires, the attack sequence is closely timed. As aircraft approach, the FAC will describe target positions in relation to marking smoke or other natural features. When satisfied that the pilot has acquired the correct target, the FAC will authorise attack. Conventional CAIRS tactics are particularly suited to slow attack aircraft (e.g. Skyraider or A-10 Thunderbolt) delivering high drag bombs or napalm. Such attacks are conducted at low altitude and in very close proximity to the target, and consequently can be readily orchestrated by the FAC.

The nature of conventional CAIRS tactics, when conducted on modern battlefields, renders attacking aircraft vulnerable to man-portable SAMs and small arms fire. Therefore, a current tactic employed to survive conventional missions is to use a very high speed ingress to the target area (1000 km/hr), at very low altitude (40m), followed by a "pop-up" to higher altitude to acquire the target and deliver weapons. Reduced exposure to enemy defences improves probability of survival, but the tactic also limits time available for the pilot to acquire the target to less than 30 seconds. Consequently, accuracy is degraded and risk of injury to friendly forces is increased. The degree of difficulty in performing such attacks limits viability of conventional tactics, but not the concept of providing support for ground forces.

Limited Multi-Role Assets

The limited number of tactical aircraft that will be available to an Australian Joint Force Commander will constrain air power options. "Control of the Air is the prime campaign of the RAAF" and is fundamental for any other campaign to be conducted without interference from enemy air power. While primacy of the Control of the Air campaign is logical, the idea that this campaign must be completed before undertaking other action fails to acknowledge the air power maxim of concurrent campaigns. This maxim has been mis-interpreted as a sequential process for Control of the Air and Air Support campaigns. True multi-role capabilities of F/A-18 and F-111 aircraft give a commander an option to conduct these campaigns concurrently, even in a single mission. Although the extent of control will be a question of degree, multi-role assets could contribute to support campaigns without significant distraction from the prime campaign for control of the air.

The proposal that limited aircraft numbers will prevent the conduct of CAIRS reveals an ignorance of Australia's doctrine for command and control of joint operations. In a letter published by the Australian Defence Force Journal, Air Commodore Ashworth succinctly illustrates the argument's fallacy:

"If... the circumstances and defence strategy dictate that RAAF fighter and strike aircraft be used to provide close support to the troops in the field, rather than, say, air defence and strategic strike, then that will occur, irrespective of what is in the doctrine or what 'the air marshals' may or may not think."

Status

The ADF does possess a considerable capability to apply tactical air power in the land environment. Close support for land forces will be provided by the RAAF's Tactical Fighter Group (TFG), equipped with F/A-18 aircraft, and/or the Strike Reconnaissance Group (SRG), equipped with F-111 aircraft. Units from these Groups would be assigned to a joint force under an Air Component Commander. Although both aircraft types can deliver precision guided munitions, CAIRS training tactics still follow conventional techniques employed during the Vietnam conflict for unguided weapons delivery.

Acquisition of the Pave Tack system has enhanced the utility of F-111 aircraft in offensive support roles. This utility has been ably demonstrated by the SRG, both by day and night, albeit in a benign air environment. F/A-18 aircraft, equipped with AN/ASS-38 Forward Looking Infra-Red (FLIR) and Laser designating pods, have a similar capability as Pave Tack equipped F-111 aircraft. An additional capability of multi-role aircraft is the ability to configure for more than one mission. This capability has been highlighted by Air Commodore B.R. Wood, then commander RAAF Northern Area, because of "swing-role" missions flown by F/A-18 aircraft during Exercise K92. Swing-role CAIRS missions were flown by aircraft that were fully equipped with armament for air defence as well as CAIRS weapons. Aircraft on air defence alert carried CAIRS armament
Future Concepts for CAIRS

In static warfare, the significant firepower of tactical air assets can categorise aircraft as “flying artillery”. However, should ground forces plan to manoeuvre, mobility of air delivered firepower must be developed and integrated with the manoeuvre plan. Integration of air power with the ground force manoeuvre plan is not a new idea. Air Marshal Lord Tedder is attributed with the following statement, made after the El Alamein victory in June 1942:

“Every night the air and ground commanders must hold a joint staff meeting to hash over problems and decide tomorrow’s program. The close air support and air interdiction campaigns can then be integrated into the ground commander’s overall concept of operations.”

The concept of air power as a manoeuvre element was proved sound during ground operations for the liberation of Kuwait in 1991. Specialised A-10, CAIRS aircraft were employed, as were multi-role F/A-18 and F-16 aircraft. FAC missions were initially flown by the USMC with role-dedicated, AV-10 aircraft, however, in high threat areas, operations were switched to two-seat, F/A-18D aircraft. The USAF conducted interdiction missions controlled by F-16 “fast FAC” aircraft.

Arguments against the conduct of CAIRS missions are peripheral to the central issue of support for ground forces. That such support is a fundamental air force role is a fact of history and current doctrine. The question of how support will be provided is the issue for resolution. Conventional CAIRS tactics, developed for the Vietnam war, are no longer matched to capabilities and weapons of the ADF. The ADF has three basic options for the future of the CAIRS role as follows:

a. the ADF could maintain the status quo, including all attendant weaknesses and characterised by FAC training for a future “Vietnam” concept of operations;
b. although not an option that would provide a joint force commander with close support air power, the RAAF could cease training for the CAIRS role; and
c. a new concept of operations, suited to current capabilities, could be developed to exploit ADF weapons platform potential.

To maintain the status quo does nothing to address the limitations of traditional CAIRS conducted on the modern battlefield. Viability of the role would be restricted by potential for high attrition or by poor accuracy. It should be noted that the RAAF has only a training, rather than operational FAC capability in support of the status quo. Should the RAAF elect to cease training for CAIRS, it is probable, and appropriate, that the Army would develop an indigenous capability for some form of air support.

In an article, highly critical of the status quo in RAAF support to Army, O.M. Ether has proposed a concept for a Tactical Air Support Group, under command of a surface force officer, and exclusively committed to CAIRS. In a small defence force, economy of effort afforded by multi-role assets responding to priorities of a joint force commander, precludes acquisition of dedicated CAIRS aircraft.

Weapons platforms of the ADF can provide ground commanders with significant and responsive firepower. However, techniques must be developed that will allow Precision Guided Munitions (PGMs) and capabilities of available “smart” technology to be exploited. A revised concept of operations, and a true operational CAIRS capability, should be developed jointly between the Army and the RAAF. Traditional CAIRS tactics, and traditional FAC techniques, must be replaced by procedures that will allow effective close support to be provided by current inventory weapons systems, without unnecessary risk of attrition.

In ADF operations, CAIRS missions will be conducted with F-111 or F/A-18 aircraft. The employment characteristic of these weapons platforms should therefore determine operational concepts. To conduct accurate attacks against tactical targets, crews of both aircraft types require precise target locations and target acquisition, either visually or by other sensors of the weapons platform (i.e. radar or FLIR).

Although F/A-18 aircraft could achieve accuracy with free-fall weapons, employment of PGMs...
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would allow attacking aircraft to remain outside the range of shoulder-launched SAMs and small arms fire. PGM stand-off makes visual acquisition of the target unnecessary and, possibly, undesirable. Accordingly, traditional target marking and close control techniques are not appropriate for ADF CAIRS operations.

Key capabilities required for effective F/A-18 and F-111 CAIRS are precise location and designation of the target and secure, reliable communication. These capabilities could replace marking smoke and close control techniques respectively. Concepts for Australian operations, within current or projected ADF capabilities, are as follows:

a. **Airborne Controlled Operations.** Airborne control of CAIRS missions could be achieved from either Army helicopter gunships or two-seat, F/A-18B aircraft. It is also projected that aircraft selected as lead-in fighters for the ADF could serve as operational platforms. Provision of the Global Positioning System (GPS) as a common navigation reference for both FAC and CAIRS aircraft would ensure precise target location. Frequency-agile radios and air-to-air data links could be used for secure and reliable communication. Automated, two-way data transfer could relieve uncertainty regarding correct targeting. A FAC operating from F/A-18B aircraft could control accuracy of PGM attacks by laser designating the required target. In future, use of remotely piloted vehicles (RPVs) could combine advantages of an elevated perspective with benefits of close liaison achieved by ground based controllers.

b. **Ground Controlled Operations.** Efficiency of ground controlled operations could be enhanced by employing hand-held GPS receivers and laser range-finding devices to determine target location accurately. Infra-red designators could be employed to designate targets precisely. Airborne Warning and Control (AWACS) aircraft, stationed at higher altitude, and clear of the battlefield surface to air threats, could be employed to relay communication between ground forces and attacking aircraft. Data links and frequency-agile radios could provide secure data transfer.

c. **Response and Endurance.** Australian operations for a land campaign to counter credible contingencies will be reliant on air power to counter vast distances that exist across the possible area of operations. In the absence of infrastructure, fixed-wing aircraft could be the only ADF assets capable of timely response. As noted by Brigadier P.L. McGuiness, "in some cases the most efficient and effective application of forces will be to employ CAIRS." The long range and endurance characteristics of F-111 aircraft, and provision of air-to-air refuelling for F/A-18 aircraft, could allow CAIRS to be integrated into the ground commander's manoeuvre plan even though these aircraft would operate from airfields that could be remote from the area operations.

**Conclusion**

Despite doctrine that endorses Air Support as one of three fundamental air power campaigns, and operation of multi-role aircraft capable of providing massive firepower, ADF development of a viable CAIRS capability has been limited. The decision taken to replace Winjeel FAC training aircraft with another slow training type that has no operational capability, suggests the RAAF is committed to the status quo. Unfortunately, conventional doctrine is based on experience gained in Vietnam 30 years ago. Because conventional tactics are designed for the environment, weapons systems, aircraft, and enemy capabilities of the Vietnam War, arguments against the CAIRS role have some validity. However, the fundamental issue of support for ground forces is not in question.

Advantage gained through synchronised application of ground and air power is a consistent lesson drawn from all conflicts since the advent of military aviation. As provision of effective air power is the RAAF’s mission, maintenance of a limited training capability in conventional CAIRS tactics is inadequate. A concept of operations is required that will integrate smart technology on the battlefield. Techniques that exploit automated transfer of target data, provide attacking aircraft with accurate designation of targets, and ensure safety of friendly forces, must be developed, or adapted, for the CAIRS mission. The RAAF has the capability, and weapons system, to overcome limitations of conventional CAIRS in an Australian environment. As the provider of air power for Australia’s security, the RAAF has responsibility to develop an operational doctrine for CAIRS that will meet the ground commander’s requirements.

**NOTES**

3. AAP 1000, op cit, p. 43.
25. Discussion regarding the "ownership" of air power in the
24. AAP 1000,
23. For further details see CAPT R. Hertberg. "Beyond the Fire
22. "Fast FAC" is a generic term used to distinguish FAC
21. Charles M. Westenhoff. Military Air Power,

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The Battle of Leyte Gulf

"The Battle of Leyte Gulf" is a brief history of Australian participation in the Liberation of the Philippines and the 50th anniversary commemorations in 1994. The text is supported by numerous illustrations in colour and black and white which capture the spirit of the events.

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To order a copy of "The Battle of Leyte Gulf" send a cheque or money order for $25.00 made out to The Receiver of Public Monies to Australian Defence Force Journal, B-4-26, Russell Offices, Campbell, CANBERRA ACT 2601.
Operation Commando – Korea, 2-8 October 1951

Prepared by Directorate of Infantry, Army Headquarters, from reports received from HQ BCOF and 3 RAR.

Introduction

The aim of Operation Commando was the capture of two dominant features to the north of the Commonwealth Division's area, believed to be key points in the Communist defence system, as part of a larger plan for the adjustment of the general United Nations line before the imminent onset of winter. These features are now well known as Points 317 and 355. The operation was undertaken by 28 Infantry Brigade, composed of 1st Kings Own Scottish Borderers, 1st Kings Shropshire Light Infantry, and the 3rd Battalion Royal Australian Regiment. Under command for the operation was the 1st Royal Northumberland Fusiliers, while the resources of the division were available in support.

The enemy positions were held by units of the Chinese 571 and 573 Regiments of 191 Division, and were well dug in in considerable depth on the ridges and spurs between the two objectives.

The ground, was rugged in the extreme, made up of a profusion of hills, ridges, and spurs in the main thickly timbered or covered with long grass. On the right flank flowed the Imjin River, while across the front and between the two objectives a tributary of the Imjin ran through the marshy floor of the valley.

The operation was planned in two phases:

First phase (COMMANDO 1):
The capture of Pt. 355 by 1st Kings Own Scottish Borderers supported by 1st Kings Shropshire Light Infantry and 3 RAR on D Day (3 Oct).

Second phase (COMMANDO 2):
The capture of Pt 317 by 3 RAR and 1st Royal Northumberland Fusiliers on D = 2 (5 Oct).

This account deals primarily with the part played by 3 RAR.

Commando 1 – 3/4 October (Map 1)

The major role in Phase 1 was given to 1st Kings Own Scottish Borderers, which was to capture Pt 355, attacking from the East. A preliminary move was the capture of Pt 199 by 3 RAR from whence tanks and MMGs would be able to cover the reverse slopes of Pt 355 during the attack. Pt 199 would also provide a pivot for a flanking attack by 3 RAR on Pt 317 in Phase 2. At 1000 hrs on 1 October, 3 RAR, which was at this stage resting and training some ten miles south-west of the battle area, moved, leaving D Company in Brigade Reserve, and arrived on 2 October in the forward area occupied by the Royal 22nd Canadian Regiment.

At the same time, 1st Kings Own Scottish Borderers moved also, the final stages of the move of each battalion being by individuals at 50 yards distance in an attempt to prevent the enemy observing the build-up in the forward area. The success of this stratagem was confirmed by POWs captured the following day, although heavy artillery concentrations fired late on 2 October and early on 3 October apparently alerted the enemy to an expectation of unusual activity on the front.

Since movement in the valley to south of Pt 199 invariably provoked hostile shelling, preliminary moves were carried out in darkness, with the additional purpose of achieving surprise. Accordingly, one platoon of B Company moved off at 0300 hrs on 3 October, followed forty-five minutes later by the remainder of the company. A heavy mist was rising from the river, and this, together with darkness and the broken nature of the ground, made progress difficult. However, by 0800 hrs the company was in possession of the high ground immediately east of Pt 199, and shortly afterwards patrols occupied the objective after a brisk action, during which light casualties were sustained, five enemy being killed and one prisoner taken. In the meantime, A Company, which had occupied the ground vacated by B Company, followed up and took over the objective at 1000 hrs, being heavily shelled and mortared while doing so.

Shortly afterwards it was reinforced by a troop of tanks from 8 Hussars and a section of MMGs in accordance with the original plan for supporting the attack by 1st Kings Own Scottish Borderers at Pt 355. B Company dug in on the commanding ground 500 yards to the east of Pt 199, both companies being shelled and mortared throughout the remainder of the day.
D Company, having been released from brigade reserve, had rejoined the battalion and was in occupation of Pt 238, to which point the CO had already moved his Command Post at first light. Two tanks of 8 Hussars were in support. At 1600 hrs, the attack by 1st Kings Own Scottish Borderers on Pt 355 was still in progress, and since unexpected difficulties were being encountered, 3 RAR was ordered to assist on the following day by attacking the strongly held 200 feature immediately to the north-east of Pt 355. ("Z" Map 1) which commanded the approaches from the east.

C Company was given this task and launched their attack at 0900 hrs on 4 October with their preliminary objective the 200 feature ("Y" Map 1). Moving through the valley the leading platoons assaulted in a westerly direction up steep slopes and by 1015 hrs were in possession and had made contact with the enemy on their final objective. This fell two hours later after a bitter fight, the enemy retreating in disorder under heavy fire from our artillery. Nineteen of the enemy were killed and three captured, while C Company suffered ten casualties, one of whom subsequently died of wounds. This successful little action was of considerable assistance to 1st Kings Own Scottish Borderers in the final stages of their attack, in which they succeeded in displacing the enemy from the formidable Pt 355 feature.

During the late afternoon, C Company withdrew to its original position to rest, while the remainder of the battalion was concentrated in the vicinity of Pt 199.

**Commando 2 – 5/8 October (Map 2 & 3)**

The outline plan for Commando 2 was for 3 RAR to attack Pt 317 from the east, effecting a junction with 1 Northumberland Fusiliers, which was attacking from the south through Pt 217, in the vicinity of the 280 feature immediately north-west of Pt 31.

3 RAR was therefore faced with a long opposed advance through difficult terrain and with both flanks threatened from enemy-held positions to the north and south.

On the night 4/5 October the artillery preparation began, heavy concentrations being fired on known and suspected enemy mortar and gun positions and on the ridges leading to Pt 317.

At 0415 hrs on 5 October B Company moved north across the valley to the high ground at "X", Map 2, followed by D Company an hour later at first light. At the same time, the Anti-Tank platoon, which was operating as a rifle platoon, accompanied by a troop of tanks, crossed the river and occupied the eastern end of the feature, its task being to cover the north-eastern flank.

Shortly afterwards, B Company moved off on the first stage of the attack. A heavy mist completely shrouded the hills, reducing visibility to a few feet, and with the broken ground and the steep thickly timbered hills, movement was extremely difficult. B Company, swinging slightly north-east, cleared the 180 feature at "W", Map 2. The capture of this ground cleared the northern flank of the advance and D Company moved off through the mist to capture the 180 feature at "V", Map 2, the first of the strongly held positions lying astride the approaches to Pt 317.

Moving slowly along the ridge, and down into the re-entrant, the leading troops reached the foot of their objective still covered by the mist and began the steep ascent. At 1120 hrs, a third of the way up the slope, the mist suddenly lifted. The Chinese were taken completely by surprise, having expected an attack from the south, but hurriedly reorganising they opened fire with grenades and small arms. The fire fight grew in intensity as the Chinese fought desperately to hold their positions, but in the face of heavy fire D Company pressed up the steep slope with great determination, closed with the enemy and by 1140 hrs the objective had been captured.

Meanwhile A Company had begun an advance against solid opposition along the ridges leading toward Pt 317 from the south-east, providing a distraction to the enemy troops on that position, and covering the left flank of the main thrust. The Battalion Command Post had moved to a spur at "Q", Map 2, from where the CO, accompanied by his battery commander, squadron commander and MMG platoon commander, had a clear view of the battlefield.

At 1400 hrs D Company again attacked, closely supported by artillery, tank and MMG fire, firstly to the ring contour feature at "U", Map 2, and then on to the high ground to the south. Again the assault was carried through with great determination and the objectives seized.

In this attack, as in the previous one, the Chinese were of at least company strength, deeply entrenched and well equipped with heavy automatics, while the nature of the ground was such as to provide the defence with every facility for concealment. In the whole action, D Company lost two killed and fifteen wounded, one of whom subsequently died. But for the dashing manner in which the assaults were pressed home in the face of heavy fire, our casualties may well have been much greater, and it is open to
Map 2.

Map 3.

Scale: Approximately 1,000 yards to 1 inch.
doubt whether the attack would have succeeded. In these actions 68 Chinese were killed, a large number wounded and 30 prisoners taken.

The stage was now set for the final assault on Pt 317 and it is perhaps worthwhile to review the dispositions of the battalion at this time. D Company, assisted by a platoon from B Company, was reorganising on its objective (see Map 3); the remainder of B Company was digging in on feature "V", so providing depth to the new firm base. A Company, though making little headway, was keeping strong enemy forces to the south-east of Pt 317 fully occupied, while C Company, which was to carry out the final assault, had moved in stages from its reserve area to its forming up position between B and D Companies.

The eastern approach to Pt 317 is a rugged cliff, to be climbed only on hands and knees, and in the face of this formidable obstacle, C Company in mid-afternoon moved off through the forward positions, well supported by artillery and tank fire. Opposition was encountered midway to the objective on the lower features at "T", Map 3, but was swept aside and the attack continued. At 1700 hrs Pt 317 had fallen, the final assault, by comparison with early actions, being in the nature of an anti-climax, ten prisoners being taken, while no casualties were suffered by C Company.

At first light on 6 October, a platoon from C Company again attacked through the mist, dislodged a surprised enemy from the feature to the north-west at "S", and held it throughout the day against determined counter-attacks, and in the face of heavy enemy artillery fire.

### Subsequent Operations

Although the objectives had been captured, the aim had not been achieved, since the enemy was still holding grimly to its positions between Pts 317 and 217. Throughout 5 and 6 October 1 Northumberland Fusiliers had attacked gallantly against Pt 217, suffering 100 casualties, but the enemy held firm. It was now appreciated that the best chances of reducing this strong-point lay in an attack from the higher ground to the north, and 3 RAR was ordered to undertake this operation. Therefore, at last light on 6 October B Company relieved the platoon of C Company at 176223, which withdrew into reserve on Pt 317. Its task was to clear the high ground to the west and south-west, it being considered that the occupation of this area would make Pt 217 untenable, an assumption which subsequently was proved correct. The attack was launched at 0800 hrs on 7 October, after the mist had cleared in order to take full advantage of artillery, tank and MMG support. This support was directed by the CO from his CP, which had now moved to Pt 317 itself, and from where the attacking infantry could be plainly seen and fire brought down very close to them.

The leading platoons reached the objective with little opposition, but as Company Headquarters and the reserve platoon followed up they were engaged by large parties of enemy emerging from concealed positions by-passed by the leading troops. A hot action ensued, considerable losses being suffered by both sides until, in the face of resolute action by the Company Commander and his reserve, the enemy broke. Reorganisation was hampered by intense and accurate artillery fire, sniping and counter-attacks, mounting throughout the day to battalion strength. B Company suffered heavy casualties, and, although reinforced by a platoon from C Company, was by mid-afternoon in a critical position. By dusk the crisis appeared to have passed, but at 2000 hrs the company was subjected to a 45-minute artillery bombardment, the heaviest yet encountered, followed by a further attack which lasted throughout the night. This time, the mist was on the side of the enemy and enabled them to reach and at times to penetrate the perimeter. At first light the attacks died away, the enemy withdrawing leaving 120 dead and wounded around B Company’s FDLs.

### Aftermath

The operation was now successfully completed and 3 RAR was relieved in the Pt 317 area by 1st Kings Own Scottish Borderers.

As the result of the very heavy casualties inflicted by the Commonwealth Division in this operation the Chinese Division in this sector was withdrawn and replaced by fresh troops. 3 RAR and its supporting arms are believed to have accounted for two battalions of this division.

The tactics employed by the enemy were mostly orthodox. Resistance was always strong on ridges and spurs leading to the principal objectives (Pits 355 and 317), and it was quite apparent that the enemy regarded these positions as key points in its main defence system. Localities were well placed, though within localities the siting of weapon pits left much to be desired. Communication trenches were too long and straight and our troops were able, as a result, to inflict many casualties in hand-to-hand fighting. Pits
were found on occasions to be twelve to fifteen feet deep with two or three sleeping bays offset one above the other. Such positions, with very heavy overhead cover, gave excellent shelter from our artillery. A separate deep trench system was used for fighting, which again afforded adequate protection from air strikes, artillery and direct fire from tanks. Weapons captured were mainly of Russian design and origin, but included a Chinese version of the US Bazooka. Others included the new Russian rifle, 60mm mortars, heavy machine-guns and “Burp” guns. Ammunition, stores and large quantities of winter clothing were also found in dumps and individual positions, indicating that they had only recently been issued. The clothing was well made and of good quality.

Possibly the most unusual feature of the operation was the increased weight and accuracy of the enemy artillery concentrations. Fire was well controlled and its effect more severe than any previously experienced by 3 RAR.

Lessons

At this distance it is difficult to be specific about the reasons for the Battalion’s outstanding success, but certain aspects, even at long range, stand out clearly:–

(a) The principle of surprise was exploited to the full. The enemy expected to be attacked from the south, and the vigorous attack by 1 Northumberland Fusiliers confirmed his viewpoint. If further confirmation was needed it was supplied by A Company approaching doggedly along the ridges from the south-east. These complementary actions undoubtedly drew enemy attention from the apparently impregnable eastern approach to Pt 317, enabling C Company to seize the feature before it could be reinforced. The speed with which the attack by C Company was mounted and driven home placed the seal of success on a well-laid plan. In fact, the speed and flexibility exhibited by 3 RAR throughout the operation, indicates a high standard of battle procedure. A further contributing factor was a fire plan designed to prevent reinforcement of Pt 317 from the north. It seems, too, that the enemy was caught off balance from the start. The secrecy which covered the original build-up in the forward area, the rapid series of blows around the enemy’s eastern flank and the use of mist and darkness to cover the launching of attacks robbed the enemy of its initiative.

(b) The principle of security was never lost sight of. As one company vacated a position, another took its place. Flanks were protected and the advance, though virtually continuous, was never without a firm base close behind.

(c) Before the operation began, a thorough reconnaissance was carried out by subordinate commanders and the plan explained to them on the ground. In consequence each had a clear idea, not only of his own part, but of the complete operation, and was in a position to respond quickly and intelligently to any change in plan or unforeseen set-back.

(d) The CO, accompanied by his commanders of supporting arms, was constantly forward, and for the most part had a clear view of the battlefield. This enabled fire plans to be rapidly made and put into operation, and the considerable supporting fire available kept flexible and employed with full effect where most needed.

(e) The cooperation of all arms was splendid. Tanks reached areas where it was never thought they could go, the artillery regiment in direct support fired 50,000 rounds, blistered paint on gun barrels indicating the intensity of the fire. Supply and evacuation kept pace with the heavy demands of the unit though the nature of the terrain made this extremely difficult. All members of the unit not actually fighting worked as porters and here valuable assistance was rendered by Korean bearers as well. In all some 900,000 rounds of small arms ammunition, 7,000 mortar bombs and 5,000 grenades were manhandled forward to companies during the operation. Divisional and Brigade plans, while designed to keep the enemy fully occupied over the whole area, allowed for maximum support to be available to whichever unit was attacking in any particular phase. It was in all, a fine example of teamwork.

Viewing the operation as a whole, it is immediately apparent that the overall tactics employed by 28 Infantry Brigade were based on the classic conception of pinning an enemy frontally while falling on his flank; tactics which were old in the days of Ghengis Khan, but which are always new when used in conjunction with surprise and the other well-tried principles of war.

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