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Front Cover
Australian Troops ashore at Loloho Wharf for the Truce Monitoring Group on Bougainville.

Photograph by
Sergeant Gary R. Ramage.

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Australian Army Medic serving with the Truce Monitoring Group Bougainville surveys the wreckage of the Arawa Hospital with a friend on Bougainville.

Photograph by Sergeant Gary Ramage
Dear Editor,

Paul Earnshaw has provided an excellent and well balanced account of the genesis and implementation of the Australian Frigate Program. (ADFJ No 126 Sept/Oct 97) He was kind enough to quote extensively from my “Haul-Down Report” after six years as Chief of Naval Materiel. I hope a few personal recollections may be of interest.

Dr Earnshaw quotes Frank Cranston’s article of September 1983 that stated “It was a Labor Government which elected to buy the US-built FFG-7 class instead of the RAN-proposed DDL-class… designed in (Australia).” It was certainly the Whitlam Government that called for a review of the DDL project and that made that decision. However the review was carried out by Navy, who considered the DDL would prove unduly expensive, and made the recommendation for acquiring FFGs, which the Labor Government endorsed. The Whitlam Government ordered three FFGs from the US and a fourth, HMAS Darwin, was added by the Fraser Government. It was very much in the mind of Navy, at the time Darwin was ordered, that the fourth ship should be a prototype for an Australian FFG build.

Dr Earnshaw reports that the AFP was the first Navy project to utilise a highly autonomous organisational structure. Soon after being posted as CNM in 1979, I was confronted with a problem of the patrol boat contract where the Cairns builder had undertaken to build 14 ships exactly the same as the lead ship Fremantle, constructed in the United Kingdom. The only difficulty with the requirement was that the lead ship was substantially overweight. The complexity of the contract administration was such that its significant amendment required the concurrence of five First Assistant Secretaries in three government departments. The contractor agreed to vary his approach, with paper work to follow, but it was realised that the arrangements were not conducive to sound project management. In the same way it was found that differing views within Navy could unduly delay decisions, and it was eventually accepted that the Project Director needed to be able to resolve such issues.

I strongly support the Project Director who emphasised the importance of clearly defined objectives. These need to cover not only the primary objectives of achieving performance within the agreed cost boundaries, but also need to identify important secondary objectives such as manpower training, skills acquisition, and industrial capabilities development. It has been a cause of a great deal of satisfaction to me that the Australian Navy and Australian industry have been able to move from an arrangement where nearly all our naval warships were built overseas, to one where nearly all are built in Australia. What we need to do now is to consolidate, maintain and extend that capability; it strengthens our industry and strengthens our defence.

Bill Rourke
RADM, (Ret)
Preparedness
FOR WHAT?

Preparedness
FOR WHEN?

Preparedness
OF WHAT?
Throughout the 1990s, Australia’s Defence Organisation has embraced across the board restructuring and rationalisation with the avowed aim of developing more efficient and effective military capabilities. Yet according to the 1997 Defence Efficiency Review (DER), the organisation remained extremely wasteful and process oriented, and the Review's key conclusion was that, “…The need to rebalance and strengthen the capabilities of Australia’s Defence Force is paramount and pressing”. Today, the Defence Reform Program (DRP) seems to have missed the point of the DER and, unfortunately, endless rearrangements to organisational charts and obsessive tinkering with command and control arrangements has become confused with the making of real progress in military capability development.

This sad saga of continued waste, weakness and imbalance begs many questions; for example:

- Has Defence really experienced genuine reform over the last eight years if major imbalances in readiness, sustainability and force structure are likely to continue and even get worse? Is Defence really making progress in terms of moving forward towards balanced military capability for the next century?
- What is wrong with Defence’s change management processes? Despite sustained investment of over 10 billion dollars year after year, why haven’t we “arrived” at a stronger, more balanced military capability? and

- Where do we go from here and how can we better manage our military capability in the new century?

This article suggests answers to these questions and introduces an alternative path to Australian defence capability management called REPERTOIRE OF MISSIONS, or ROMINS.

### Putting Capability in Context

Australia’s ten billion dollar defence budget is used – in one way or another – to buy, develop and maintain military capability. And, according to current ADF doctrine, military capability is made up of two basic ingredients: Preparedness on the one hand and Force Structure on the other as indicated in Figure 1:

<table>
<thead>
<tr>
<th>PREPAREDNESS</th>
<th>FORCE STRUCTURE</th>
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<tbody>
<tr>
<td>Readiness</td>
<td>Sustainability</td>
</tr>
<tr>
<td>Ability to do at specified strength and capability</td>
<td>Ability to support forces for a specified time</td>
</tr>
<tr>
<td>Platforms /Equipment /Units (Numbers and types of each)</td>
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The challenge of achieving optimum military capability, for a given budget, is striking the right balance between preparedness (consumption) and force structure (investment), over many years. However, getting the balance right is tricky because of the dynamic tension between preparedness and force structure. For example, if we buy more of one ingredient, we get less of the other – more investment...
in preparedness means less money for force structure, and vice versa.

Also, without enough of any one of the two key ingredients, the advantages provided by the other can be drastically – sometimes catastrophically – compromised. Consider the Black Hawk disaster: Australia invested heavily in 39 utility helicopters, but poor aircraft availability, over a number of years, affected proficiency – itself a key preparedness factor – and only a small fraction of the potential military capability of the fleet ever existed.  

On the other hand, spending up big to grow a highly trained horde of professionals, but only having enough money left over to provide them with third rate equipment, also seriously degrades net military capability. Furthermore, if we neglect either preparedness or force structure for long enough, it takes disproportionate amounts of time and treasure to catch up.

Research undertaken at the Australian Defence Studies Centre (ADSC) concluded that a major cause of Australia’s current and prospective military capability imbalance has been prolonged subordination of preparedness (consumption) to force structure (investment) during most of the post Vietnam era. Thus, “fixing” the preparedness side of the military capability equation is seen as a key to getting a better balanced Defence Organisation equipped with the right capabilities with which to shape tomorrow’s security environment.

In 1996, the Australian National Audit Office (ANAO) produced a Preliminary Study of the Management of Australian Defence Force Preparedness. It found that “major gaps” exist in the ADF’s preparedness planning and implementation framework – gaps that hamper the determination of realistic preparedness objectives, associated resource requirements and accurate measurement of achievement against these objectives”. Specifically, preparedness management deficiencies noted by the ANAO include:

- Under developed preparedness framework,
- Uncoordinated management of preparedness,
- Lack of a cohesive strategic preparedness concept,
- Inadequate joint perspective,
- Insufficiently defined operational roles,
- Inadequacy of the CPD (CDF Preparedness Directive) based management system,
- Poor corporate understanding of preparedness methodologies,
- Poor understanding of linkage between resource inputs and preparedness levels,
- Poor understanding of the MLOC to OLOC dynamic, and
- General inflexibility.

The Defence Efficiency Review of 1997 was also highly critical of the lack of focus on defence preparedness and the capability development process.

The Review reached five key conclusions; the two most important being:

- The need to rebalance and strengthen the capabilities of Australia’s Defence Force is paramount and pressing (as noted above).
- Creating and practising joint force operations in times of peace will be essential to determining what needs to be improved and we must monitor the success of measures taken.

The second fundamental DER conclusion is critical. Research undertaken at the ADSC concluded that the most severe limitation on the current system of preparedness management and measurement is that units are not consistently tested under conditions similar to those that would be encountered during actual contingencies. Moreover, Defence continues to make two basic mistakes when managing joint operations. First, it consistently over-rates the ease with which groups of otherwise well qualified navy, army and air force units can be put together for exercises and operations. Second, it under-rates the benefits of regular, realistic training together as a team with the same doctrine and techniques over sustained periods.

Another important research finding was that validation of actual performance remains the “Achilles Heel” of Australia’s Defence Organisation. Validation of military capability, in terms of confirmation of joint performance standards, has come to rely on reporting. For example, attempts to validate preparedness under the Chief of the Defence Force Preparedness Directive (CPD) failed with CPD 94 because validation was based on reports from interested stakeholders, who were themselves supposed to be prepared, reporting back on their own preparedness states. CPD 94 gave only the illusion of planning and was soon maintained as “interim but unendorsed” guidance for several years, while planners became paralysed with analysis. If CPD 98
follows the same flawed pattern of reliance on reporting, then it, like its predecessor, will fail. When all is said and done, any changes concerning whom, when and what is reporting, or being reported on, will only be of marginal significance with respect to genuine validation. The system will continue to be fundamentally flawed unless a robust, independent form of joint preparedness assessment and validation is fed into the system.

Why has our Quest for Preparedness Failed?

Defence organisations have traditionally been biased towards one of two basic approaches to dealing with strategic uncertainty – EITHER increase the information processing power of the organisation OR change the organisation and/or the task itself so that less information is needed to operate successfully.

**UNCERTAINTY**

<table>
<thead>
<tr>
<th>INCREASE ORGANISATION'S INFORMATION PROCESSING POWER</th>
<th>CHANGE ORGANISATION AND/OR THE TASK SO THAT IT CAN OPERATE WITH LESS INFO</th>
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<tbody>
<tr>
<td>More reviews</td>
<td>Operate initially on the basis of “general coordinates” of expected strategic environment – then adapt to the details of real life situations</td>
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<td>More C3</td>
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<td>More committees</td>
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<td>More reporting</td>
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<td>More organisational change</td>
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“**TOP DOWN**”

Org Change Dynamic:
Adjust organisational efficiency to drive operational effectiveness

“**BOTTOM UP**”

Org Change Dynamic:
Use operational effectiveness to drive organisational efficiency

What is ROMINS?

ROMINS is a mission oriented approach to defence preparedness that focuses on making the ADF expert in three core missions and their variations (see illustration on p.8). The three core missions are geared to bridge a broad spectrum of potential contingencies and will be conducted in ways that “hurt” enough to generate self-correcting feedback which cannot be ignored or buried. The Program makes use of a favourable strategic/economic window of opportunity in the seven years from 1999 to 2006.

The multi mission orientation of ROMINS simplifies the preparedness problem by demonstrating, in real time, how the ADF actually “delivers” under a range of scenarios. This sets in train a practical pattern of preparedness feedback, evaluation, self-correction and planning. Most importantly, validation of mission effectiveness is based on assessments that test – as fully as possible – capabilities through the full range of actions required during contingencies. Major tests should begin with mobilisation and continue through accomplishment of missions. Conditions should also be as close as possible to those encountered during combat within the constraints of reasonable safety criteria.
REPERTOIRE OF MISSIONS (ROMINS)

Become expert in three core missions that bridge this contingency spectrum

Possible Contingency

INVASION of Australia
PERMANENT LODGEMENT of foreign forces in Australia
TEMPORARY LODGEMENT of foreign forces in Australia
MAJOR RAIDS against Australia
AGGRESSION against friends
BRIDGEHEAD operations conducted by ADF overseas
COALITION OPERATIONS (Warfighting)
SPORADIC ATTACKS against vital Australian military/civilian targets
SPORADIC ATTACKS against isolated Australian military targets
COALITION OPERATIONS (UN/Peace Enforcement)
SEIZURE of Australian ships, cargoes, embassy or nationals overseas
ILLEGAL EXPLOITATION OF EEZ RESOURCES backed by a foreign government
HARASSMENT of shipping, fishing or Offshore assets
NON VIOLENT PROBES into Australia’s EEZ/Airspace
SUSTAINED DISRUPTION OF SLOCS
LARGE, UNREGULATED POPULATION FLOWS
HOSTILE POLITICAL PROPAGANDA and harassment of nationals.
SUPPORT OF SUBVERSIVE GROUPS in Australia by another government.
SANCTIONS against Australia
ECONOMIC/POLITICAL COMPETITION

THE THREE CORE MISSIONS

TASK FORCE LIFT (TFLs)
SURGICAL STRIKE AND SUPPRESSION (SSSs)
EXCLUSION ZONE OPERATIONS (EZO)
Redefining Preparedness

One of the main reasons Defence has spent the best part of a decade wrestling with preparedness issues is that its current conception and definition of preparedness tells only half the story.

Preparedness is not simply a matter of achieving and maintaining fixed levels of readiness and sustainability over a period of time. Limiting the definition of preparedness to the readiness and sustainability of the force in being neglects the importance of having *enough* forces to win. The current ADF definition of preparedness can include cases of having forces that may be able to fight quickly and even outstandingly for a while, but lack the *mass* (numbers, kinds and quality of equipment) to succeed in the long run. This is preparedness to fail and not to prevail.

Preparedness, in its broadest sense, is simply having the military capability to prevail. This means having *enough* capability to apply when it is needed for as long as it is needed. The three pillars of military capability are readiness, sustainability and *mass*. Not having enough of any one of these three ingredients means we are unprepared.

**Figure 3. A New Definition of Preparedness**

Getting a grip on Preparedness

Richard K. Betts, in his book *Military Readiness: Concepts, Choices and Consequences*, suggests that becoming prepared (he uses the term *ready*) depends on how a country balances the answers to the following three fundamental questions over a long period of time:\[4\]:

Preparedness FOR WHAT = What will we have to do?
Preparedness FOR WHEN = When will we have to do it?
Preparedness OF WHAT = What will we need to do it with?

We will call these questions, and the issues associated with them, the three dimensions of preparedness. Development of the ROMINS Program started with looking at how the three dimensions can be dealt with best in the Australian defence context.

On page 10, some of the issues, uncertainties and risks associated with the three dimensions of preparedness are illustrated. Note that each of the three dimensions is interrelated and involves many variables, dilemmas and trade-offs. Also, it is important to keep in mind that balancing and integrating answers to Preparedness FOR WHEN, FOR WHAT and OF WHAT over a decade or so, especially in a non obvious threat environment, can never be more than an exercise in risk management – or more precisely risk containment.

ROMINS attempts to bring the three dimensions of preparedness into simultaneous focus in the Australian security context. The illustration on page 11 explains the three-step process used to do this.

We must now begin to clearly understand each of the three dimensions in terms of their strengths and limitations, as well as how they change and how they can be influenced, controlled and integrated.

**Managing PREPAREDNESS FOR WHEN**

For 20 years Australian Defence planners – whether they realised it or not – used Preparedness FOR WHEN as the key dimension to bring the three dimensions into simultaneous focus. In the 1970s, and even well into the 1980s, this approach worked well enough. It doesn’t now.

**Warning Time and Expansion Time**

Warning Time and Expansion Time have been used as the key underpinnings of Australian defence planning. They are basically tools to control Preparedness FOR WHEN issues and settings. Defence planners assumed that sufficient warning and expansion time gave time to pin down Preparedness FOR WHAT and Preparedness OF WHAT issues.

That is, there would be time enough to recognise an emerging threat and acquire enough appropriate capabilities. However, strategic and technological changes in the last 20 years have seriously eroded the effectiveness of Warning Time and Expansion Time to control Preparedness FOR WHEN – and hence the other dimensions.

**A warning about WARNING**

In the late 1990s the validity of Warning is compromised because:

- Preparedness for Short Warning Conflict has become Australia’s strategic priority.
- Access to advanced military technologies has increased throughout the region. This has led to major problems in “counting” military capabilities, and hence in determining limits on times and levels of conflict/contingency. Simply
Issues, Uncertainties and Risks in dealing with the Three Dimensions of Defence Preparedness

**Preparedness FOR WHEN?**

- How much time will we need to prepare and respond?
- How reliable is Warning Time?
- Can we expand our capabilities in time?
- When should we start building up?

**Preparedness FOR WHAT?**

- What kinds of missions will we need to conduct?
- Who are we up against?
- What is their capability?
- What is their plan? What is our plan?

**Preparedness OF WHAT?**

- What kinds of people and equipment do we need to prevail?
- How many people and how much equipment do we need?
- How do we train and employ them?
CONTROLLING the Three Dimensions

FIRST, *contain* the risk of getting fundamental settings in each of the three dimensions of preparedness seriously wrong.

SECOND, *pull* the three dimensions into ‘simultaneous focus’.

THIRD, *develop* a UNIFYING THEME that will be understood by all Defence stakeholders and can provide a basis for communication at all levels.

*ROMINS SATISFIES ALL THREE PREPAREDNESS CONTROL REQUIREMENTS*
counting numbers and kinds of platforms no longer reliably indicates capability.

- Australia is finding it harder to maintain its traditional capability edge. Regardless of intent, most countries in our region of interest have growing economies that underwrite already significant and improving conventional force capabilities.

- Australia faces a broader range of military involvement, including a much wider range of Military Operations Other Than War (MOOTW). In these cases, warning is far more difficult to determine compared with exclusively defence of Australia contingencies.

- There is always the distinct possibility of a failure in political response, even if warned in time. Political leaders may be reluctant to escalate a situation by being seen to mobilise, and may wait until what they perceive to be the last possible moment.

The Expansion Myth

The second key assumption traditionally used by Australian planners to contain risk in the Preparedness FOR WHEN dimension is that of having enough expansion time available to prepare against a threat. However, substantial and “smooth” mobilisation is extremely difficult and expensive as modern military forces become more complex and diversified. Military forces have become much harder to “grow”, maintain and surge because:

- Growing technological complexity of equipment translates into much longer lead times and higher unit costs.

- Highly specialised maintenance and operating personnel take much longer to train and are harder to retain, so rates of unit expansion are drastically reduced.

- Increased “tooling up” times exist because military platforms and systems are no longer simple or mass produced. Most are now customised.

- Capabilities that are relatively easy to mobilise, like infantry, have become less important in modern war and MOOTW.

- A declining national recruiting base exists. Indifference, and in some cases cynicism, towards military service in a declining recruiting population means that significant mobilisation is unlikely to occur unless a direct, large scale threat becomes obvious.

- Expansion plans have to be endorsed by politicians. Again, political leaders may be reluctant to escalate situations by being seen to mobilise.

These factors add up to involvement in “come as you are” situations involving at best only moderate mobilisations.

The implication of these changes is that Preparedness FOR WHEN has become an increasingly unreliable basis on which to set Australia’s pattern of preparedness. We have to choose another focus dimension.

Managing PREPAREDNESS FOR WHAT

Management of Preparedness FOR WHAT issues came under heavy fire from the Defence Efficiency Review. It observed that a general lack of confidence in strategic policy formulation and the current process of developing strategic guidance, “…frequently results in a lowest common denominator product”. The Review also pointed out that, “…There is almost unanimous support for the notion that strategic guidance does not go far enough in adequately describing the nature of the tasks the ADF might face in future conflict”. The ROMINS Program uses a three step, risk management approach to getting a grip on Preparedness FOR WHAT. The steps are:

- Define the basic services Australians and their Government will always expect Defence to deliver.

- Develop a contingency spectrum that relates to these basic services and reflects Australia’s broadened security agenda.

- Decide on a minimum number of core missions that can be adapted to handle most kinds of contingency in the spectrum.

“Services” Government Expects

Defence must provide what Government values and will pay for. What matters most to Government now and in 2010 is that it can “win”, influence situations, avoid embarrassment and feel confident in justifying its military preparations and actions to the electorate, its allies and the international community. In 2010 we can assume that there will remain three basic defence “services” that Government sees as serving vital and important national interests:

1. ASSERTING SOVEREIGNTY by having the capability to conduct operations to defend Australia directly and police its EEZ. This is reflected in Government’s requirement for Defence to maintain the ability to conduct sustained, long-range, conventional missions.

2. “PAYING DUES” by contributing to collective security arrangements like ANZUS, ABCA, FPDA and the ANZAC Pact. Government expects Defence to help sustain and invigorate
Australia’s relationship with the US, and be able to contribute to coalition forces.

3. BEING A GOOD INTERNATIONAL CITIZEN by conducting missions that contribute to international good order and the right to be heard in international assemblies. This includes humanitarian intervention and aid, peace enforcement, peacekeeping and sanction enforcement.

A Contingency Spectrum

A selection of possible contingencies associated with these services is illustrated in the Contingency Spectrum 2010-2020 on page 14.

Three Core Missions

The ROMINS Program uses three core missions to cover the contingency spectrum. Missions are chosen on the basis of meeting Government’s three basic capability needs and their individual abilities to cover a large enough contingency “bandwidth” in key areas of the spectrum. These missions are Task Force Lift (TFL), Exclusion Zone Operations (EZO) and Surgical Strike and Suppression (SSS).

TASK FORCE LIFT (TFLs)

Task Force Lift (TFL) involves quickly “picking up”, protecting, delivering and supporting an Army combined arms task force of approximately six thousand troops and their equipment. This force, or selected parts of it, can contribute to serving all three of Government’s basic capability requirements.

The Task Force can be deployed within Australia, where it could serve as a self-contained fighting formation to help deal with troubles at the highest levels of the spectrum, or, after deployment, it could be split up into a number of splinter units to handle problems at mid-spectrum levels. After lift, the task force would deploy and conduct an intensive exercise program involving high levels of “free play” against a well equipped opposing force.

The Task Force could also be deployed into Australia’s local area for bridgehead operations where protective preserves could temporarily be set up. Bridgeheads are secured areas from which Australian citizens or refugees can be evacuated, locals can be protected or support can be given to legitimate governments. The Force could be adapted for a wide variety of operations, ranging from direct involvement in coalition war fighting operations, to engagement in much more likely peace enforcement and peacekeeping operations, right down to supporting UN sanctioned humanitarian interventions.

SURGICAL STRIKE AND SUPPRESSION (SSS).

A range of situations exist where use of substantial conventional forces would be cumbersome, disproportionate or inappropriate, especially in the mid to lower ranges of the Contingency Spectrum. Surgical strike and suppression missions demand a variety of special forces and selected conventional units capable of engaging in missions like hostage rescue in Australia and overseas, evacuation of nationals, protecting offshore assets like oil rigs, counter-terrorism/piracy, aid to police forces and intelligence gathering. SSS capabilities would usually be used extensively in conjunction with the TFL mission.

EXCLUSION ZONE OPERATIONS (EZOs)

EZOs reflect Government’s expectation that Defence should be able to control specified sea areas and the airspaces above them. EZO missions may range from exercising general command and clearance of the sea-air gap out to 100 miles from Australia’s shoreline over a large, specified and declared area in the north for a set time; to absolute enforcement of a 50 mile maritime exclusion zone around Christmas Island.

While EZOs primarily provide the sovereignty assertion service to Government, EZO capabilities are important in providing protection and support during Task Force Lift, and can also be used extensively in Paying Dues and “Good International Citizen” activities. These include participation in major international exercises, coalition operations and UN sanction enforcement. Highly trained naval and air force elements capable of precision strike, whose primary mission is EZO, would also be involved in SSS operations.

Managing the Preparedness FOR WHAT dimension means adapting Australia’s military capabilities to service a broadened security agenda and span the Contingency Spectrum. The ROMINS Program will use control over Preparedness FOR WHAT to bring the other dimensions into simultaneous focus.

Managing PREPAREDNESS OF WHAT

Serious questions exist about the adequacy of Defence to decide what platforms, equipment and concepts of operations it needs and how it should use them. In March 1997, the Defence Efficiency Review concluded that, “…in the absence of a sufficiently
CONTINGENCY SPECTRUM 2000-2020

Possible Contingency

INVASION of Australia 20
PERMANENT LODGEMENT of foreign forces in Australia 19
TEMPORARY LODGEMENT of foreign forces in Australia 18
MAJOR RAIDS against Australia 17
AGGRESSION against friends 16
BRIDGEHEAD operations conducted by ADF overseas 15
COALITION OPERATIONS (Warfighting) 14
SPORADIC ATTACKS against vital Australian military/civilian targets 13
SPORADIC ATTACKS against isolated Australian military targets 12
COALITION OPERATIONS (UN/Peace Enforcement) 11
SEIZURE of Australian ships,cargoes,embassy or nationals overseas 10
ILLEGAL EXPLOITATION of EEZ RESOURCES backed by a foreign government 9
HARASSMENT of shipping, fishing or Off Shore assets 8
NON VIOLENT PROBES into Australia’s EEZ/Airspace 7
SUSTAINED DISRUPTION of SLOCS 6
LARGE, UNREGULATED POPULATION FLOWS 5
HOSTILE POLITICAL PROPAGANDA and harassment of nationals 4
SUPPORT OF SUBVERSIVE GROUPS in Australia by another government 3
SANCTIONS against Australia 2
ECONOMIC/POLITICAL COMPETITION 1

AUSTRALIA FACES A BROADENED SECURITY AGENDA AS IT ENTERS THE 21ST CENTURY

This contingency spectrum ‘signposts’ a large number of possible contingencies in rough order of seriousness: from economic/political competition, through a range of Military Operations Other Than War (MOOTW), to major combat operations. Most other situations can be placed somewhere at or between these levels. While a ‘real life’ contingency would be different in detail to those ‘signposted’, it would be similar in nature to at least one or more of the 20 listed. Probability of a contingency arising generally decreases as we move up the spectrum.

2000-2010 is likely to be a relatively stable, ‘watershed’ period where most Asia Pacific players will focus on nation building, economic development, consolidation of successions and resolving some ‘hangovers’ of the Cold War. This will be done against a clear backdrop of US military superiority and engagement.

2010-2020 could see rapid deterioration if power relativities change significantly, economic growth rates are not maintained, military capabilities continue to steadily increase across the region and a peer competitor with the US starts to emerge.

GETTING PREPARED means developing and testing an adaptive mechanism that hedges against post 2010 uncertainty and adverse developments across this spectrum.

Developing an adaptive mechanism that gets Australia prepared to prepare must be well underway by 2005.
articulated strategic direction, there remains considerable scope to dispute guidance on parochial grounds or to continue to dispute decisions once taken ...the process of capability analysis is still under resourced and, as a result, the process takes too long and its output lacks definition...There are too many organisations competing in establishing capability analysis”.

The ROMINS Program accepts this situation as all but inevitable. Nevertheless, the Program chooses to bypass it by largely ignoring the hardware aspects of Preparedness OF WHAT ! ROMINS simply assumes that some sort of conventional, general purpose sea, air and land capability will come out at the end of the convoluted capability analysis and acquisition processes. What ROMINS does do is concentrate on Preparedness OF WHAT factors that it can influence for the better; that is, the personnel and operations components.

Generally, how assets are used and by whom is more important than precisely what they are, or whether they are quite as up to date as the opposition’s. Strong evidence from the last 30 years of conflict, under a wide variety of conflict conditions, agrees with centuries old conclusions that heightened efficiency and effectiveness emerging from intense training can override large imbalances in mass, and can compensate for marginal limitations of technical quality in weapons.

Readiness and sustainability have always mattered because they influence deterrence and relative strength calculations and, basically, wars start when disagreements about relative strength arise. Today, readiness and sustainability have become even more important to Australia because:

- The march of technology makes it progressively harder to maintain the variety and intensity of expertise and training in a small force. Australia cannot rely on having enough trained people or equipment for large scale mobilisation.
- Smaller numbers of people and machines mean Defence must be more versatile and better “tuned”. Personnel need to be made more highly proficient to preserve the minimum necessary pool of skills.

Unfortunately, for two decades Warning Time and Expansion Time have been used to justify prolonged emphasis on investment in mass (numbers, kinds and quality of equipment) in preference to consumption on readiness and sustainability. ROMINS redresses this imbalance by putting priority on improving the quality of the force from the bottom (people) up. This involves rebalancing capabilities in favour of readiness and sustainability; even if this has to be done at the expense of mass in terms of putting up with a little less platform performance, maintenance flexibility and availability from time to time.

Arresting the decline in readiness and sustainability demands rigorous monitoring and assessment. Assessment should be based on robust measures of effectiveness that can be traced down through the entire matrix of combat and combat support activities. Research suggests that the following three key measures of operational effectiveness may serve this purpose:

- Time on Target performance (ability to get to the job quickly and perform),
- Force Concurrency (ability to “connect” with other units and work as part of a joint team), and
- Sustainability (ability to continue doing the job until it is completed or the unit is resupplied or relieved).

Getting a grip on Preparedness OF WHAT means reinforcing the ADF’s commitment to developing superior tactical skills, motivation and innovation in its people. Boosting the readiness and sustainability of the ADF so that the very best use of available mass is made, is a central objective of the ROMINS Program.

How ROMINS works

Five Fundamental Changes

1. **KEEP it Simple**

Simplicity is a well established though seldom used principle of war and planning. Our basic approach to getting the Defence Organisation prepared should be able to be quickly and clearly understood by all Australians – from “the man in the street” and teenage recruit in his or her first week of training, to the CDF and Minister for Defence. The ROMINS approach to getting prepared can be stated in the following seven second “sound bite”:

“...This is the range of threats Defence must be able to handle. We are becoming expert in three missions that cover this range” (pointing to a ROMINS display chart).

2. **SWITCH our Preparedness Focus Dimension.**

Pull the three dimensions into simultaneous focus by controlling Preparedness FOR WHAT instead of Preparedness FOR WHEN.

Abandon Preparedness FOR WHEN as the key to getting Australian defence preparedness back into
balance. ROMINS pins down Preparedness FOR WHAT by making Defence expert in a repertoire of missions that provide “insurance” across the contingency spectrum. Preparedness FOR WHEN is then brought under control because warning and expansion become much less critical. This is because ROMINS drastically reduces response time across the spectrum by setting up a standing, high baseline of versatile operational capabilities. Preparedness OF WHAT is also controlled through a marked increase in quality of tactical and operational skills across the spectrum. Defence will be able to do much more with whatever is available at the time.

All three dimensions are brought into simultaneous focus and become mutually reinforcing. Setting the new pattern of preparedness using Preparedness FOR WHAT means Defence can react faster to a wider range of situations in ways it has recently practised, and make the best use of whatever assets it has at the time.

3. REVERSE our change management process.

Use operational effectiveness to drive across the board efficiency.

During the last decade of almost constant change, Defence has tried to use continual adjustment to organisational efficiency to achieve across the board operational effectiveness – and has failed. ROMINS reverses this approach. Across the board organisational efficiency will be learned from a determined drive for operational effectiveness, rather than doing it the other way around. This gets us back to core business and stimulates self-correcting feedback that cannot be ignored.

4. DON’T formulate strategy. Let strategy FORM.

Forget fancy strategies. Break persistent paralysis by analysis situations by putting the quest for perfect strategies in the “back seat”. Useful strategies need not be brought about deliberately by going through agonising processes of formulation and compromise, followed by fitful implementation. ROMINS goes beyond elegant strategy. It is an adaptive mechanism that generates conditions where working strategies will be arrived at by successive approximations in response to peak learning situations over seven years. In short, the ROMINS Program employs the principle of – Do More; Plan Less.

5. USE robust Measures of Effectiveness (MOEs).

Stimulate strong, self-correcting feedback using MOEs set at the highest level of performance aggregation.

ROMINS reveals and remedies performance problems in the complex organisational cluster which is Defence by using Time on Target Performance, Force Concurrency and Sustainability as unambiguous performance measures. While being used as bulk measures of operational performance in the first instance, they can readily translate into derivative MOEs that can be used to assess, monitor and correct throughout the matrix of combat and combat support activities.

ROMINS routines

ROMINS embraces three phases which we will call the “3Ms” – MOVE, MONITOR and MEND. MOVE Doing more: planning less

Defence needs to know which processes and parts of its total system will “break”, when they will break and how they will break. The MOVE Phase regularly puts defence preparedness to the test on a “total system” basis under realistic, “load” conditions. Realistic training means striving for peak learning experiences by injecting the arduous and unexpected, with intense concentration in faithfully reproducing near combat interactions among processes, people and weapons systems. Realistic training also means exercising against a large, capable, well equipped “enemy” under conditions that involve as much free play as possible.

Three steps are involved in Moving:

1. AGREE on a spectrum of possible contingencies that is broad enough to satisfy most military and security stakeholders. This means signposting a large number of potential contingencies arranged in rough order of “seriousness” – from political/economic competition through MOOTW scenarios to major combat operations. Note the 20 contingencies used in the ROMINS model.

2. BRIDGE the contingency spectrum, and avoid becoming scenario specific, by using the three high pay off missions (TFL, SSS and EZO) illustrated in the model.

3. BECOME expert in the chosen Repertoire of Missions by making missions “hurt”. “Hurting” means intentionally maximising the density of interconnections between units by conducting missions with substantially increased scale, frequency, duration and realism. Unfortunately, many current exercises involve too many artificial conditions of scale, duration, intensity and conduct. ROMINS makes missions regular, peak
learning experiences involving intense asset utilisation under “full load” conditions.

“Full load”, for the TFL mission as an example, would be a naval force of 4 Frigates, 2 AOR, 2 THSS; an Army Task Force comprising 4500 ARA and 1250 GRES in a variety of units based around four battalions; and an Air Force Task group with a core of 56 aircraft (24 FA18, 12 F111, 8 P3C, 12 C130).

For a variety of economic, administrative and strategic reasons explained in the forthcoming book:

• Each of the three core missions will have a 60 day duration, comprising 30 days to go from MLOC to OLOC, followed by 30 days of sustained, intense operations. “A ROMINS MISSION PROFILE” is illustrated on page 18.

• Missions involve approximately 40 per cent of the ADF’s regular combat forces and some reserve units. During each 60 day period much of the remainder of the ADF would either act as a highly capable, free playing “enemy” during missions, or as a standby or Sentry Force capable of handling emergencies that may arise while the ROMINS Group nears exhaustion and recovers. The Sentry Force’s nature, strength and level of standby alert will be determined by the prevailing security situation.

• The three core missions are completed in a two year, command team posting cycle. “A TWO YEAR ROMINS MISSION CYCLE” is illustrated on page 19.

• Three complete ROMINS cycles (six years) are needed to become expert in the missions, test the total defence system, restore a “bedrock” of military professionalism and build detailed understanding of relationships between resource input and variations to preparedness. A favourable “window” of economic and strategic opportunity exists during FY 1999-00 to FY 2005-06. The seven year window is illustrated on page 24. Note that FY 1999-00 is used as a “work up” year where, for cost and training reasons, only a single core mission – probably a Task Force Lift – is conducted.

Importantly, the MOVE Phase of ROMINS expects and allows for significant variations in possible conflict scenarios, with the aim of providing the flexibility to adjust preparedness objectives quickly. Furthermore, the MOVE Phase assumes that actual contingencies encountered in real life will vary in detail – but not in general nature – from those in the contingency spectrum.

Also, note that the MOVE Phase incorporates a predominantly capabilities based, or even training based approach to preparedness, rather than a threat based approach.

To make ROMINS work and translate today’s operational consumption into long term investment for Defence, we need strong, systematic feedback that cannot be forgotten, ignored or “buried”. Getting and recording this feedback is the cornerstone of the MONITOR Phase.

**MONITOR Finding out what breaks and why.**

As previously mentioned, Defence is basically a complex cluster of organisations, where measuring effectiveness of lots of the “bits” will not add up to an unambiguous indication of total system performance. Cumulative defence performance is what counts, so Measures of Effectiveness (MOEs) must start from “the top”; that is, at the highest level of aggregation in order to generate strong, unambiguous feedback that guarantees accountability at all levels.

Three steps are involved in Monitoring:

1. **“SHAKE DOWN”** as many combat elements as possible by using three fundamental measures of effectiveness (MOEs) to directly observe and assess each participating unit and platform in each mission. The “BIG 3” MOEs are:

   **Time on Target Performance** measures ability of each unit/platform to get to the job quickly enough and perform to standard. Unit “X” either reaches the target quickly; with the right equipment and ordnance and does what it is told to do – or it fails to do so.

   **Force Concurrency** measures ability to work as part of a joint team. Unit “X” either works with and “connects” effectively with Units “Y” and “Z” at the right place and in time – or it fails to do so.

   **Sustainability** measures the ability to “hang on” for long enough in operations. Unit “X” either performs to standard for as long as necessary, and is relieved in time – or it fails to do so.

2. **TRACE** through the matrix of joint combat support interactions. Everyone in Defence is supposed to have a “customer” to whom something that bears on defence output should be delivered on time, to a certain standard, within budget and usually in conjunction with other people, units or branches. This means that tailored variations of the BIG 3 MOEs can be used to determine causes of success and failure at all levels of mission performance and support.
A ROMINS MISSION PROFILE (240 days)

ROMINS UNITS
A. 90 days at MLOC
B. 30 days Workup
C. 30 days Operations
D. 10 days Draw Down
E. 20 days at RLOC
F. 60 days Buildup to MLOC

SENTRY FORCE UNITS
G. 30 days Workup
H. 30 days on Alert
I. 30 days Draw Down

OLOC = Operational Level of Capability
MLOC = Minimum Level of Capability
RLOC = Recovery Level of Capability
A TWO YEAR ROMINS MISSION CYCLE

- Conduct all three core missions over two years (730 days)
- Complete this two year cycle three times over six years (see back page)
- This process reveals what plans, platforms and procedures ‘break’; when they break and how they break!
3. TRACK resource consumption and flows in real time over the seven year program. This builds up a knowledge base that can reliably relate changes in resource input to changes in mission performance and, ultimately, variations in preparedness levels. Realistic mission preparation and performance gives reliable indications of Activity Levels (ALs), Usage Rates (URs) and resource consumption in the process of going from MLOC-OLOC for all force elements. The MONITOR Phase establishes Defence’s operational condition, or where it is, what it can do and what it can’t do through direct observation. The MEND Phase pushes Defence to the next higher level of performance.

MEND Focusing on function rather than on form

Three steps are involved in Mending:

1. IDENTIFY combat support systems and processes that are not geared to quick, effective response and cooperation. Unsatisfactory performance is unambiguously measured and recorded in terms of the BIG 3 MOEs and their derivatives.

2. ELIMINATE, bypass or reengineer processes to meet the three key measures of effectiveness and their derivatives.

3. PILOT new arrangements during the next mission. As mentioned, a seven year ROMINS Program involving 10 mini mobilisations is needed to become expert in core missions, and fully understand relationships between resource input and preparedness levels for a variety of combat and combat support elements.

On completion of the ROMINS Program in mid 2006, Defence will have reached a strategic “Vantage Point” from which it can take stock. Defence can decide whether it needs to continue to use the full ROMINS system, or dilute it to provide more “headroom” for capital acquisition in the light of likely post 2010 developments.

WHY GET SO SERIOUS ABOUT MISSIONS?

Military missions matter because being expert in them affects perceptions of relative strength, deterrence and, eventually, diplomatic leverage. A mission oriented pathway to Australian defence preparedness is needed because:

• It’s time for Defence to have a “reality check”,
• Missions pull the Defence “cluster” of organisations into focus,
• We need much better, more practical ways to measure what we can do,
• Missions restore accountability and reclaim initiative, and
• We can use missions to become an Action Learning Organisation.

It’s time for a “reality check”

Demanding missions are “reality checks”. After a decade of constant change throughout the cluster of disparate and competing organisations that make up Defence, we need to know just what Defence is and is not capable of. The ROMINS Program reveals what Defence’s real strengths and weaknesses are because it:

• puts traditional processes and theoretical operating assumptions to the test,
• exercises and tests demanding coordination skills,
• highlights “jostling” or phasing problems caused by stepped up Defence activity levels,
• shows up support bottlenecks and delays,
• clarifies arrangement of pivotal work in pivotal areas,
• identifies parts of Defence that are “slow” or disconnected,
• highlights performance inadequacies and incompetencies that lurk below the surface in peacetime,
• uncovers areas of redundancy and waste,
• makes trade-offs transparent, and
• reveals delusions and lies about capability that exist in peacetime.

Pulling the Defence cluster into focus

Demanding joint missions are “natural” mechanisms for getting all key parts of Defence working together and can be likened to civilian emergency disaster drills. According to a US Army War College paper called Joint Readiness Evaluated: “…Emergency disaster drills seek to determine the capability of the diverse emergency management agencies to operate effectively together, to understand one another’s capabilities and limitations, to collect, analyse, disseminate and act upon data and information, and to integrate the collective to attain the agreed objective. These are the same elements we

More reasons for ROMINS

The logic of taking the ROMINS path to preparedness is highlighted in answers to the following four questions.

• Why get so serious about missions?
• Why use a repertoire of missions?
• Can we afford ROMINS?
• Can we afford not to take the ROMINS Path?
must be able to measure to ensure the readiness of the joint task force…”

Strong mission orientation under the ROMINS Program pulls the Defence cluster into line by focusing the entire organisation on observable outputs and clear assessment criteria. Actually using forces to do things makes it easier to identify, “capture” and cost specific inputs and outputs for each significant link in the preparedness process. Over time, this improves Defence’s ability to distinguish between high value tasks and low value tasks.

The ROMINS Program also gives clear planning guidance concerning the likely employment of each service in what are judged, and set at the highest levels, as the three most probable kinds of future missions. This integrates joint service performance.

Why an empirical approach is needed.

Defence must have certain kinds of critical information based on practical experience, assessment and measurement. Real defence preparedness lies along the path of experiment and observation rather than theory, approximation and simulation. Large scale military mobilisations and operations are extremely complex system interactions with literally thousands of “parts” and people moving at different rates and often in different directions. Myriad activities and seemingly paradoxical management adaptations during contingencies vary in unexpected ways over time and situation. Consequently, modelling assumptions have to multiply to approximate and explain even relatively simple interactions.

In short, preparedness is hard work. There are no simulation “silver bullets”. To fix the system we have to test it long and hard to find out what works and what doesn’t. Only after having got reliable, hard data can we avoid “garbage in, garbage out” situations in modelling and simulation.

Regaining accountability and reclaiming initiative

By 2005, Australia could have a regular defence force numbering less than 50,000 persons. The quality of personnel in this force must be of the highest possible standard. The ROMINS Program is a vehicle that can raise these people’s pulse of endeavour by generating a strong bias for action. This produces a real sensibility to and intensity for results that in turn increases the challenge for people to make more of their own decisions. This breeds responsibility and yields superior leadership across the board.

ROMINS reclaims initiative because it is “fundamentally satisfying”. It gets to the roots of performance problems and has desired military values automatically built into its mission oriented processes.

ROMINS also guarantees high user acceptance because it regularly provides the majority of the ADF with “stretch” assignments that focus on core business and concentrate on “delivering goods” that can be seen and measured. The program even provides opportunities for fun, excitement and challenge!

Very importantly, reclaiming initiative involves fault tolerance. If an element of “fault tolerance” is not built into the ROMINS Program, widespread risk aversion will continue and missions will not show exactly what is going on – cover ups, covering of “backs”, cynicism and inertia will abound. Fault tolerance is associated with acceptance of a learning situation and, to change what has become a risk averse organisational culture, Defence needs to become a truly reflective learning organisation.

Becoming an Action Learning Organisation

Ultimately, the key to a secure Australia is growing and keeping the right people who can adapt to rapidly changing situations and win with ideas – people who can learn. Action Learning Organisations accept tasks or changes as vehicles for learning. Self-development and organisational development are designed to go hand-in-hand, because action on the change problem not only changes the problem, it also changes the people working on it. People are likely to become more flexible, capable and confident in a wider variety of tasks. Across the board efficiency and effectiveness results.

The ROMINS Program is a sound platform for building an Action Learning Organisation that can fully leverage existing capabilities in ways that lead to faster learning because:

• Missions are natural learning catalysts. ROMINS provides systematic cycles of learning that increase learning opportunities and rates. Learning becomes a natural part of the daily routine.
• Missions are “energising problems”. ROMINS accelerates learning by providing highly stimulating learning goals.
• Missions are regular proving grounds for new ideas which can be practically tested “on the job”.
• Missions unlock creativity in ways that are action oriented. Actually doing things stimulates independent, creative thinking and is one of the most effective ways of clearing procedural “cobwebs” to achieve objectives.

Thus, a dynamic, mission oriented ROMINS environment is likely to link individuals and teams into faster learning and more effective networks, and provide continuous opportunity for self-development, empowerment and organisational renewal.
The ROMINS Program is organised around Defence people. They can use their talents and make decisions while mastering technologies, tasks and tactics that make them perform better than anyone else.

**Why have a REPETOIRE?**

Becoming expert in a *repertoire* of high pay off missions provides:

- **Reasonable Risk Management.** Choosing a limited repertoire of missions is simply a process of explicitly recognising and hedging against risk. Defence has to intelligently cater for a broadening security agenda by maintaining competitive advantage in a few of the most probable kinds of future military operations.

- **Responsible Resource Management.** Resource constraints, escalating costs and the growing diversity of military operations, including MOOTW, make it harder for Defence to be “good at everything”. In an era where middle powers find it increasingly difficult to maintain capability edges, Defence has little choice but to define an affordable number of “jobs” that are agreed to receive focused investment.

- **Adaptability.** The multi-mission orientation of a repertoire does not count on being prepared for a single scenario, a particular plan or the use of a limited set of tactical skills. Defence becomes naturally more adaptive through “multi-mission” skilling. This adds up to increased ADF confidence; not only when handling difficult situations but when faced with new ones. Also, feedback from lots of tough, multi-mission experience “self-corrects” assumptions about strategy, organisation and equipment.

- **Flexibility.** ROMINS is an adaptive mechanism that *gets Defence prepared to prepare* by providing a framework for making successive strategic approximations. The specific repertoire of missions can be adjusted as strategic circumstances change. Government can choose the best mission portfolio every two years to meet current and emerging needs. The contingency spectrum can be added to, deleted from and the order of contingencies can be rearranged.

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**Paying for Preparedness**

**Can we afford ROMINS?**

ROMINS is affordable. Figures representing the upper limits of *incremental direct cost* of the Program from FY 1999-00 to FY 2005-06 are illustrated on page 24. Costs average at well under half (43 *per cent*) of estimated Defence Reform Program (DRP) net savings over the period. The percentage figure given at the bottom of each column represents ROMINS cost as a percentage of estimated net DRP savings for that year. An overall, annual cost increase of 10 *per cent* is assumed for each year of the ROMINS Program.17

ROMINS costs given in the diagram are incremental and direct. Costs are incremental because they are on top of, or in addition to, the costs of all current and programmed Defence commitments. They are direct in that they include costs of fuel, ammunition, personnel, rations, stores, repairs and Cash Limited Administrative Expenses. However, costs could be reduced by more than half by:

- incorporating many parts of the current ADF exercise program in ROMINS missions as serials,
- using currently allocated flying/steaming/under canvas times better, and
- mending misguided and wasteful capital acquisition and spares procurement habits.

These aspects are discussed at length in Chapter 9 of the forthcoming book.

**Can we afford not to take the ROMINS path to preparedness?**

Research in Australia and the US suggests that if savings are not locked into a carefully planned operations based program like ROMINS, they are likely to be drawn into capital acquisition “black holes”. Savings may be eaten up by bids for more equipment and paying disproportionate premiums for a few extra percent in equipment performance if money is available and untargeted.18 The ROMINS Program limits scope for extra capital equipment “shopping lists” to about half of expected DRP savings.

Finally, *more of the same* management of defence preparedness exposes Australians to the danger of entering the new millennium with a “hollow” defence capability – an understaffed, poorly practised and poorly motivated defence organisation that may not be able to prevail against a growing range of challenges.
What ROMINS can deliver

ROMINS gives Defence an opportunity to bridge Australia’s preparedness performance gap by providing:

- A **unifying theme** that can be easily understood and “believed in” by most who have to live and operate with it.
- A pattern of preparedness risk management that is reasonable, responsible and adapted to Australia’s unique geostrategic circumstances.
- A better basis for determining specific preparedness requirements and organising forces to exploit geography and technology as much as possible.
- A rigorous method for deriving preparedness objectives, with an emphasis on force concurrency issues and requirements for joint operations.
- A reliable way of getting a detailed understanding of the resource implications of different preparedness states.
- A management information/monitoring system that can measure achievement against three specific performance indicators.

ROMINS also passes the **SAFE** Option test. That is, it is a Suitable, Acceptable and Feasible Program.

ROMINS is **SUITABLE** because it provides Government with capabilities to satisfy its three basic needs – to Assert Sovereignty, Pay Alliance Dues and be seen as a “Good International Citizen”. It also achieves the political-military imperative of shifting Defence Reform Program (DRP) savings directly to the “sharp end”.

ROMINS is **ACCEPTABLE** because it is a simple approach to defence management that stakeholders throughout the Defence Organisation can understand and find fundamentally satisfying. It is a program based on the intuitively attractive principle that “plenty of proper practise makes perfect”. This sits well with the service person, the defence civilian, the civilian contractor, the politician and the taxpayer.

ROMINS is **FEASIBLE** because the seven year program can be accomplished with available means. It is “bottom up” in terms of using only available and currently programmed platforms and personnel. It can be paid for with about half of the currently identified net Defence Reform Program savings that have been earmarked by Government for just such a purpose. The balance of DRP savings provide enough financial “headroom” for the capital acquisition program.

In summary, we need to follow the ROMINS path to preparedness because it:

- gets Defence back to core business,
- accepts and hedges against tomorrow’s strategic risks and uncertainties,
- uses a strategic/economic window of opportunity (1999-2006),
- tells us what works and what doesn’t,
- changes our people and processes for the better, and
- restores a solid bedrock of military professionalism.

**What to do Now**

FY 1998-99 Establish a small, mobile ROMINS implementation team directly responsible to CDF.


FY 2000-01/02 Conduct first two year ROMINS cycle. Review.

FY 2002-03/04 Conduct second two year ROMINS cycle. Review.

FY 2004-05/06 Conduct third two year ROMINS cycle. Review.

Mid 2006. Take Stock. Decide whether Program should proceed.

**END NOTE:**

**PREPAREDNESS IS HARD WORK.** We have to test the real system over a long time to find out what breaks, when it breaks, why it breaks and how it breaks – ROMINS provides Defence with this urgently needed “reality check”.

The ROMINS Program fundamentally changes the way we deal with preparedness management because it reverses Defence’s characteristic approach to change. Across the board Defence efficiency and effectiveness can now be achieved by using operational effectiveness to drive organisational efficiency – not the other way around.

Implementation of the ROMINS Program is suitable, acceptable and feasible and commitment to ROMINS is a commitment to superior Defence capabilities with which to shape tomorrow’s security environment.
ROMINS WILL COST UNDER HALF (43%) OF ESTIMATED NET DEFENCE REFORM PROGRAM SAVINGS DURING FY 1999-00 to FY 2005-06
ROMINS HITS TARGET!

The ROMINS Preparedness Program was presented to the Chief of the Defence Force by Lieutenant Commander Alan Hinge in September 1997 after initial presentations to the Department in April and May. This mission, or task orientated, approach to preparedness management has found acceptance in many parts of the Defence Organisation and should provide a sound basis for development of future preparedness methodologies and strategies.

NOTES
2. It is now widely accepted that a major factor contributing to the Black Hawk disaster was lack of proficiency as a result of poor aircraft availability in the years leading up to the disaster, with most of the fleet being non-operational for long periods during 1992-5. For example, in January 1995 it was reported that only three Black Hawks were considered fully operational because of unavailability of spare parts, corrosion and fatigue resulting from extended use of long-range fuel tanks. These factors apparently led to problems in crewing aircraft, including a lack of qualified loadmasters that, in turn, affected proficiency of crews in formation flying, air mobile operations and special forces operations. Note that the root cause of failure cannot be attributed to lack of money. Lack of available spare parts, or lack of the ability to repair them, need not have been a problem given that the Black Hawk project was very well funded with an approved budget of $750 Million (eventually $784 M) and the project gave a staggering $144 Million back in “change” (write backs) to Defence.
3. This was a logical outcome under a succession of what were almost exclusively “Defence of Australia”/ No threat for 10 years policies.
5. DER Addendum. p. 81
6. DER. p. 57
7. The two approaches to handling uncertainty are outlined, with numerous examples, in Van Creveld. M, Command in War (Harvard University Press, Mass, 1985)
9. DER Addendum, p.81
10. DER Addendum, p.83
11. A detailed breakdown of the force is given at Annex 9A of the forthcoming book. Essentially, this size force, which is based around four battalions, was chosen because its deployment and subsequent operations represent a demanding “stretch” exercise for the ADF. It is also a force capable of exhibiting a high level of “self containment” and all round self defence under considerable pressure.
12. DER Addendum, p.84
13. See Cordesman and Wagner. Lessons of Modern War Vols I-III (Westview Press, Boulder, 1991). This series is the comprehensive, three volume study based on research conducted for the US Advanced Research Projects Agency (DARPA) on the lessons of modern war between 1973 and 1990. The conflicts analysed cover a very wide variety of conflict, including the Arab-Israeli conflict of 1973, the Soviet Invasion of Afghanistan (1979-89), the first Gulf War between Iran and Iraq(1980-89), the 1982 Israeli invasion of Lebanon and the Falklands War (1982). These events cover a broad spectrum of conflict styles, task environments, political backgrounds and participants: From a World War One revisited scenario in the Middle East to modern conventional power projection at its extreme limits in the South Atlantic, to mixtures of conventional and irregular warfare fought under a broad spectrum of conditions and constraints. Obviously, the five conflicts varied in terms of objectives, force structures, weapons employed, tactics and training and support, but particular areas of focus during the studies were in examining the:
   • conduct and value of joint and combined operations ashore and afloat;
   • utility and impact of military technology and relative impact of tactics and force numbers;
   • level and importance of support technologies as adjuncts to or replacements for major weapons systems;
   • impact of weather, terrain, distance and other special combat conditions; and
   • role of warning, threat assessment, intelligence and tactical C3 and C3I systems.
14. There is growing consensus in business that good strategies can form as well as be formulated. For example, Mintzberg suggests that, “…One of the fallacies of conventional management is the notion that strategy is something that should happen way up there, far removed from the details of running an organisation on a daily basis…This explains a good many of the most dramatic failures in business and public policy today...Strategies can form in response to an evolving situation (and) I believe that the problem often lies in the distinction we make between (strategy) formulation and implementation, the common assumption (being) that thought must be independent and precede action”. Strategy can be developed through a process of “logical incrementalism” which does not require initially tightly defined features and structure. Logical incrementalism is premised on “the future” being arrived at through successive approximations and not by “invention” through grand strategy.
15. Each phase is described in detail in Chapter 7 of the forthcoming book.
17. Detailed costings and assumptions are included in Chapter 9 and Appendices to the forthcoming book.

ROMINS costs are calculated from a variety of sources, including the Department of Defence Schedule of Rates and Charges (Supp 2 to CEI Pt 9 Ch 1). Note that, despite the current low inflation economic environment and highly competitive arms market, cost escalation of military hardware and consumables runs significantly higher than the national inflation rate. Also, key figures to arrive at costs (for the TFL mission as an example) are:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DIRECT/_INCREMENTAL COST ($97-8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naval Task Force Month</td>
<td>$ 18.8 M</td>
</tr>
<tr>
<td>(2 FFG, 1 AOR, 1 THSS at OLOC)</td>
<td></td>
</tr>
<tr>
<td>Army Task Force Month</td>
<td>$ 23.9 M</td>
</tr>
<tr>
<td>(4500 ARA, 1250 GRES)</td>
<td></td>
</tr>
<tr>
<td>Air Force Task Force Month</td>
<td>$ 16.1 M</td>
</tr>
<tr>
<td>(56 aircraft – 24 FA18, 12 F111, 8P3C, 12 C130)</td>
<td></td>
</tr>
</tbody>
</table>

18. In March 1997, A.K Wrigley, a former Deputy Secretary of Defence estimated that waste arising from poor project management of acquisitions was of the order of five to six billion dollars over the last ten years (Television interview, Sunday, 25 March 1997). Given that 20 billion dollars was...
Lieutenant Commander Alan Hinge is Director of the Australian Defence Studies Centre’s Defence Industry and Logistics Program. He holds an MA in Strategic Studies and is author of the book Mine Warfare in Australia’s First Line of Defence (SDSC ANU, Canberra, 1991). Lieutenant Commander Hinge has contributed several chapters to books and has edited four books, including two highly successful books on defence project management. He has had over fifty articles published in professional journals in Australia and overseas, is winner of a dozen international essay writing competitions and is a contributor to the Australian Dictionary of Biography. His first article, Active Defence in Depth: An Integrated Defence Strategy for the 1990s, appeared in the July/August 1984 issue of ADFJ. His most recent publication is Seapower in the New Century (ADSC UNSW, Canberra, 1997) with J. McCafferie eds.

Lieutenant Commander Hinge has received several research fellowships including the inaugural 1993 Rockwell scholarship in Strategic studies and the inaugural Chief of the Defence Force Scholarship.

earmarked for acquisition during that time, this represents about 25-30 per cent of the total budget. These figures, as well as the generally poor state of major capital acquisition and project management, is supported by detailed evidence arising from the ADSC’s analysis of 30 major defence projects. See Hinge. A and Markowski, S, eds “Pitfalls and Pointers in Defence Project Management” Vols I and II (ADSC, Canberra, 1995 and 1997).

By Major Anton Kuruc, RAInf.

Introduction

The Army 21 (A21) mechanized infantry battalion has the capability to conduct both offensive and defensive combined arms manoeuvre operations. These operations are conducted most successfully in a reconnaissance pull framework where reconnaissance assets identify surfaces and gaps in the enemy’s posture in order to target the battalion’s combat power against an enemy’s critical vulnerability (Gray, 1994, p.94). By conducting such operations, the mechanized infantry battalion is able to dislocate, disrupt or destroy an enemy by use of its integral firepower, mobility, communications and flexibility.

The conduct of reconnaissance operations is designed to provide information that reduces the amount of uncertainty upon which tactical plans are built. The greater the degree of certainty, the greater the chances of developing a successful battle plan. Thus reconnaissance operations should result in greater certainty for the friendly force whilst simultaneously increasing the degree of uncertainty experienced by enemy planners.

In order to conduct successful manoeuvre operations the mechanized infantry battalion needs sufficient integral assets to conduct reconnaissance over a wide frontage, or in depth, whilst conserving the main combat power of the battalion to conduct decisive manoeuvre.

By recognising that the reconnaissance company is a small part of a larger battlefield picture, we are incorporating a “systems” approach (Stoner, Yetton, Craig & Johnston 1994, p.46) to the conduct of reconnaissance operations (Schmitt 1997 pp.54-60). By developing an organisational orientation that is adaptive in a complex systems framework it is possible to introduce elements of Chaos Theory (Karch, 1993, p.58) into our tactical thinking.

Successful reconnaissance pull operations require a different mental framework, or paradigm, to that of command push operations. “A paradigm is the set of preconceptions we bring from our past to each new situation we have to deal with…it…is a set of beliefs or assumptions we make about the world, normally beneath the level of awareness and therefore mostly never questioned… The origins of all our explanations of everything… lie in the process of socialisation, in the shared cultures formed by people in groups. [It] flows from shared… experience and is reflected in our skilled behaviour, that is, the rapid actions we take automatically to perform complex tasks without thinking about how, and often why, we are performing them.” (Stacey, 1996, p.52). “The specific paradigm that permeates contemporary Western thought is… the Newtonian worldview… [which] is deterministic, linear, concerned with the predictable interaction of objects and forces, oriented towards sequential change.” (Mann, 1992, p.55).

This paradigm is based on the scientific rationalism of cause and effect which stresses that by continually reducing the problem we can find the one cause that produces a definitive and predictable outcome or effect. In the Army we apply this mindset through the command and control paradigm. The underlying assumption is that strong centralised command (cause) will result in effective control (effect) allowing the force to maintain stability and operate in an ordered manner in the dynamic disordered environment that is the battlefield.

The conduct of command push operations will almost always be necessary at some point during a conflict. The tools that support command push: such as the Military Appreciation Process (MAP), are well understood and of proven value. They support the basic command and control paradigm and are technically rational in that “They analyse the facts using the step-by-step rules of logical reasoning to generate all the options open to achieve their
objectives... They calculate the effects of carrying out each option on their objectives, choose that option which maximises their objectives, and then act to implement that option.” (Stacey, 1996, p.33). They are most appropriate in an environment of sufficient certainty to enable a reasonably accurate assessment of the future situation which affects implementation. This approach accepts strategy (or tactics) as a plan or a pattern (Mintzberg & Quinn, 1996, pp. 12-13).

The military tries to order the Chaos of the battlefield by formulating a plan for friendly forces based on a sound understanding of the enemy’s pattern of activity that defines the strategic or tactical intent (Wing, 1995, p.22). This orientation is based on the “machine metaphor” of organisational analysis which posits that “…correct design [of the organisation and its resultant behaviour] will lead to the accomplishment of the objective.” (Dunford, 1995, p.4). This analogy is firmly rooted in the scientific modernist world view which strongly influenced Clausewitz (van Creveld, 1991, p.35). The scientific modernist view persists through many theorists who apply mathematical equations from Newtonian physics to explain the conduct of manoeuvre operations. The machine view shapes the belief that output can be controlled through a formal, mechanistic, centralised and departmentalised command structure. (Dunford, 1995, p.4) This perspective is introspective and consequently slow to adapt to a rapidly changing environment.

The reconnaissance pull challenge is not to create a better command and control system, but, rather to create a better system that operates more effectively with less command and control. Reconnaissance pull operations succeed by adapting rapidly and effectively to a constantly changing external environment (Gray 1994, pp. 75-79). This implies that a reconnaissance pull paradigm needs to be based on “speed and effect”.

To be able to cope with such an externally focussed viewpoint we need a different organisational metaphor - the “organism metaphor” (Dunford 1995, pp.4-5, Leonhard 1997 p.48). The organism metaphor stresses the need to adapt to an external environment to survive. The analogy demands that strategy (or tactics) be viewed in terms of a “position” within an environment, where a position of strength enables an organism to thrive. Strategy (and tactics) must also be thought of as a “perspective”, which understands external environmental events. This leads to a common organisational understanding of objectives and behaviours required to achieve organisational intent (Mintzberg & Quinn 1996, pp.13-15). Strategy (or tactics) will be “emergent” as numerous “automatic” low level actions take place in pursuit of organisational goals (Mintzberg & Quinn 1996, pp.3-18). By their very nature pull operations will be emergent as an environmental perspective positions the friendly force in gaps where the battalion can generate an overmatch in combat power, thereby thriving in the battlefield environment.

In order to thrive organisms needs to be able to rapidly adapt to a highly complex, uncertain and very dynamic environment. Rapid action is needed at the lowest level necessitating a devolution of command responsibility, and authority, to those elements with the best environmental perspective. This is generally provided by the closest externally focussed elements to the environment, which is often the reconnaissance force. Those forces must have the freedom to act rapidly to destroy the opponents ability to gain a good perspective of the same environment (the battlefield) viewed from a different position.

This fight for superior environmental perspective is often referred to as the counter–reconnaissance battle. Results from the National Training Centre in the United States suggest that “90 per cent of the units that win the counterreconnaissance fight win the subsequent battle.” (Boltuc & Efflandt, 1996, p.31). These results can be understood in terms of chaotic criticality which argues that “…small actions...often assume larger significance in a commander’s mind than they deserve.” (Nicholls, and Todorov, 1994, p.55)

Philosophically this is a post-modern acceptance that reality is firmly rooted in the point from which it is viewed and the personal bias of the observer (Kuhn, 1962, in Cottingham 1996, pp.350-355 and Wheatley, 1992, p.63). From the outset the reconnaissance company needs to create the negative criticality for the enemy commander based on a decisive loss in the counterreconnaissance battle which results in the loss of environmental perspective creating a mental view of the commander’s reality which is ripe for defeat.

Our understanding of reconnaissance needs to be broadened from; “…a mission undertaken to obtain...information on the enemy and terrain...of the battlefield.” (ADFP 103, 1995) to include three important functions that represent the forces interaction with its operating environment and integration with friendly force action. Reconnaissance includes: providing a sound perspective on the operating environment, denying the enemy the ability to gain a sound perspective, and positioning the following force into a thriving position within the environment.
The mechanized infantry battalion reconnaissance company must be capable of operating in a complex and fluid environment characterised by a lack of information. The reconnaissance mission will be emergent, changing as information is gathered and analysed, as a perspective on the environment becomes clearer.

The reconnaissance company’s environment has two distinct components, the internal environment and the operating or external environment. Both have a direct impact on the company’s ability, and the method selected, to achieve the assigned mission.

The Internal Environment.

The internal environment consists of those factors which affect the ability of the reconnaissance company to achieve its mission or task, over which the company has control. It includes:

a. **Effective organisation.** The number of available and taskable sub units will directly affect the manner in which the company can undertake its mission. It will set a limit on what can physically be achieved.

b. **Effective equipment.** The effective equipment holdings of the company may determine the type of tasks that can be conducted, and the manner in which they are executed.

c. **Effective personnel.** The number of effective personnel available will have a direct impact on how much equipment can be operated and what effective organisation can be staffed, thereby affecting the scope of operational possibilities.

d. **Administrative situation.** The administrative and logistic situation will set limits on the duration of tasks, the effectiveness of equipment and personnel, and the time required to prepare for, or recover from, an operation.

e. **Training level.** The level of training, both individual and collective, directly impacts on the ability to achieve a mission. Unlike equipment and personnel effectiveness, prolonged operations should improve the training and experience of the company making it able to plan and execute increasingly difficult operations.

f. **Preparation time.** The allocation of an appropriate amount of time can help overcome most limiting factors.

g. **Morale.** The morale of the organisation will limit or expand the number of operational possibilities of the organisation. Higher morale will enable the organisation to achieve greater results in the face of a tougher external environment.

These factors combine together to determine the physical limitations of the company defining its strengths and weaknesses. The internal environment is not isolated from the external environment. External factors have a strong influence on the internal environment. The internal environment is constantly interacting with and changing the external environment and vice versa. This is one feedback loop among the many that comprise battlefield as a whole (Figure 1).

![Figure 1. The Reconnaissance Company Internal Environment](image)

The Operating Environment

The operating environment consists of those factors, beyond the direct control of the reconnaissance company, which affect its ability to achieve a mission. Each factor will have a different degree of relevance to the company depending on the type of mission being undertaken. These factors will interlink to form a very unstable and complex external system which will determine the operational techniques that might be used by the company. A small reconnaissance unit will have only a limited influence on the operating environment as a whole, however it can have a major influence on one or two operating environment components if it adopts a
thriving position. The operating environment consists of the following factors:

a. **Own parent unit.** The parent unit will set the company mission detailing freedoms and constraints that need to be adhered to. The company must be aware of the intent and the boundaries of the parent unit in order to ascertain the parent units critical information requirement. The parent unit also represents a primary feedback loop from the reconnaissance company interacting in the operating environment.

b. **Other friendly units.** The company must be aware of the operations of other friendly units in the area of operations to avoid fratricide and to synchronise, where necessary, with other units.

c. **Enemy reconnaissance/counter-reconnaissance forces.** The enemy’s reconnaissance forces will engage friendly reconnaissance in the counter-reconnaissance battle. It will be crucial that this battle is won to provide the freedom of action necessary to conduct reconnaissance on the enemy’s main force whilst constraining his ability to reconnoitre friendly elements. The company must be positioned to destroy part of the enemy reconnaissance force in order to create gaps, both physical and electronic, to facilitate reconnaissance pull or to deny this opportunity to the enemy.

d. **Other enemy units.** It will be these units that the reconnaissance company will be primarily interested in. The company must identify the intent of the enemy in order to detect critical vulnerability.

e. **The physical environment.** This includes the actual terrain, weather, season, visibility etc. It will encompass built up areas and other man made features.

f. **Time and space available.** The amount of time available will have a large direct bearing on how operations are conducted, as will the amount of battle space available to operate in. The company should be deployed well before the main force and often prior to the unit mission being decided.

g. **Intelligence situation.** The intelligence situation will initially target the activities of the reconnaissance company. Where there is little intelligence a broader search or surveillance of an area will need to be undertaken, where the intelligence picture is good the company can act more specifically. If the intelligence situation is poor the company will generally require more time and space to achieve its tasks.

h. **Civilians in the area of operations.** The presence of civilians in the area of operations will put constraints on the way the company operates. The attitude of civilians to Australian Defence Force personnel will be a crucial issue that influences company operations.

i. **Air situation.** The air environment has a direct potential impact on the land environment. The force with supremacy of the air will be able to enforce a set of operational constraints on the opposing force. Friendly air assets may also be able to operate in conjunction with the reconnaissance company to locate the enemy, detect other vital information, and fight the counter-reconnaissance battle.

j. **Fire support situation.** A positive fire support situation will enable a more aggressive reconnaissance posture to be adopted, particularly in the counter-reconnaissance battle.

k. **Communications situation and electronic situation.** The communications situation will be an important factor that impacts on the manner in which the company executes its plan. The enemy’s electronic warfare capability must be assessed when preparing for a mission. Reconnaissance company assets must identify gaps in the electronic, or systemic, reconnaissance and surveillance screen that the enemy establishes. Friendly reconnaissance operations may need to be supported by electronic warfare devices that misinform or negate the enemy’s electronic devices.

l. **Administrative and logistic situation.** The operational techniques to sustain and maintain the company in the area of operations will be a key determinant on the manner in which a plan is executed. This will include all logistic issues from the availability of support from civil infrastructure to the ability to win water locally.

m. **The political situation.** The political situation will affect the way that a plan is executed. Political constraints may be imposed on an operation, especially peace support operations. The presence of the media in the area of operations may also influence the political direction of operations by providing a quicker feedback loop to the Government, and the general population, than the military command chain. Factors in the operating environment will combine to create the opportunities that the company must be able to exploit in order to achieve its mission. Operations should achieve a “tactical fit” between the internal and operating environments to maximise the chances of mission success.

All of the components of the reconnaissance environments will be permanently forming complex
feedback loops with each other, creating an exceptionally fluid, complex and chaotic environment. This system of multiple feedback loops is non-linear and therefore contains the conditions to easily and rapidly move from a condition of relative stability to Chaos. In such a non-linear system it is impossible to create a system of reliable control and “...in the absence of reliable control, unpredictable dynamics are not difficult to generate.” (James, 1996, p.29). Sufficient certainty to undertake successful command push operations can only be gained for short periods of time in localised parts of the battlefield. The company provides sufficient certainty whilst simultaneously increasing enemy uncertainty, for a short period of time at a specific place, enabling friendly forces to switch to command push operations against an enemy’s critical vulnerability.

A critical vulnerability is any part of the enemy’s system, which if attacked, will set off a chaotic chain reaction that leads to massive internal disorder that significantly reduce the ability to survive in the operating environment. “Large interactive systems perpetually organise themselves into a critical state in which a minor event starts a chain reaction that can lead to catastrophe…” (Bak and Chen, in Mann, 1992, p.60). The reconnaissance company provides the environmental data input required to operate technically rational decision making processes necessary to formulate a plan that initiates a catastrophic chain reaction in the opponents system. “Chaos appears when the system has insufficient time to relax and recover before the next ‘event’ occurs.” (James, 1996, p.17) reinforcing the need for speed and effect.

As the perspective provided by the company is localised and temporary the opportunity to move to a thriving position within the environment is momentary and therefore must be taken and executed rapidly. The reconnaissance company will need sufficient integral resources and organisational flexibility to achieve this demanding task (Figure 2).
The mechanized infantry battalion reconnaissance company should consist of four officers and 89 other ranks broken into two mechanized reconnaissance platoons, a sniper section, a headquarters element, an intelligence detachment and a logistic group. The suggested outline organisation structure is contained in Figure 3.

A brief overview of the company’s operational capability, based on the sniper section and the two reconnaissance platoons, is outlined below.

Snipers are utilised like an acupuncturist’s needles. By piercing the skin of the patient, needles are able to penetrate to the nervous system causing temporary paralysis or loss of sense in a particular part of the body (Sheridan, 1997). By extending the use of this analogy, snipers should be employed in depth against critical information nodes that form the enemy’s nervous system. The new anti-materiel rifle will allow sniper pairs to achieve enormous temporary effect that potentially set off catastrophic chain reactions. Sniper pairs should be employed against identified targets and operate in clusters against the same component of the nervous system.

During the counter-reconnaissance battle, snipers are employed to reduce the enemy’s ability to conduct electronic surveillance of the battlefield, communicate environmental perspective to headquarters, and to reduce the enemy’s reconnaissance force. This targets the enemy’s ability to “see” – a sense that acupuncture can remove. Snipers are an offensive system that destabilise the enemy’s system reducing the ability to gain a sound perspective on the environment.

Each reconnaissance platoon consists of a platoon headquarters, an electronic warfare detachment and three sections. The platoon has a great deal of
flexibility as it is able to be broken into discrete tasking units such as:

a. three mounted patrols each based on a pair of vehicles and a headquarters patrol,
b. two mounted vehicle quads,
c. three dismounted patrols and three mounted vehicle pairs,
d. three dismounted patrols and two vehicle quads,
e. three dismounted patrols and one mounted patrol of all the platoon vehicles, and
f. any other viable break up of the platoons assets.

The flexibility and firepower of the platoon allows it to self-organise into the most effective “mutations” to exploit the changing environment. One vehicle in the platoon headquarters and one per section should incorporate thermal imagers and other systemic reconnaissance and surveillance assets that enhance the ability to gain environmental perspective.

The electronic warfare detachment has a role in locating the enemies communication and electronic information gathering systems and nodes. Ideally it should be targeted against those systems “blinding” the enemy by either interfering with surveillance systems or the ability to communicate their perspective to other parts of the system. Both of these activities deny the enemy environmental perspective and hamper their ability to adapt to a thriving position relative to friendly elements in the operating environment. Electronic coverage of the battlefield implies a potential to undertake action that destabilises our view of the environment. Therefore gaps in the enemy’s posture must be both physical and electronic.

The MAP works best where sufficient intelligence data is available to be inputted through the Intelligence Preparation of the Battlefield (IPB) process. The reconnaissance company gathers the data for the IPB process by identifying the nature of unknowns in the operating environment in order to provide the critical information required to develop a successful plan.

A command push plan will work best where the situation is relatively known and contingencies are assessed on the basis of identified enemy elements rather than the assumption of what those factors are.

The most potent application of the command push element of the battle will come when force is applied in strength against an enemy’s critical vulnerability. Reconnaissance company is responsible for finding that vulnerability and acting to destabilise the enemy’s system. Thus we thrive at the expense of the enemy’s ability to survive. It is clear that we may not necessarily have to directly attack an enemy, or their centre of gravity, if we can reorder the environment.

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**Figure 4. Effect Of Reconnaissance Pull Operations**
Adapted from Stacey, R.D., *Strategic Management & Organisational Dynamics*, 1996 p.47
into a place that threatens the enemy’s survival.

Figure 4 illustrates that “technically rational decision making” processes, such as the MAP, are most effective where there is a reasonable degree of external certainty and internal agreement (Stacey, 1996, chs 4 & 5). Internal agreement in this context includes a wide acceptance of specific action required to meet organisational intent or to convince superior commanders of a plan presented during the backbriefing process. A plan based on relative certainty is more likely to fit in with a superior commander’s intent. Furthermore subordinates will generally be more comfortable executing a “firm” plan which is based on relative certainty rather than relative uncertainty. The technically rational decision making process is not equipped to deal with a situation characterised by a relatively high degree of uncertainty.

The greater the unknowns the less likely a plan will match the reality of the environment. Ideally, reconnaissance pull operations will draw the environmental situation to a position of sufficient temporary certainty allowing technically rational decision making procedures to be successful. It should be stressed that complete certainty will probably never be achieved and a commander will need to overcome residual uncertainty by the use of bold action (Gray, 1994, pp.7-9 & 71-101) based on the use of analytical tools, such as the MAP, which assist in the management of acceptable risk.

The ability to conduct reconnaissance pull operations will require new tools that are specific to such operations. They must be based on an appropriate thought paradigm, be flexible enough to cope with great uncertainty and complement planning of command push operations. They must stress speed and effect, rather than command and control, through automation and devolved authority. Execution will often involve more than just the reconnaissance force and will pull the main force towards a position to achieve the broad organisational intent.

"Just Do It" - A Rugby Analogy

Rugby provides a good analogy of warfighting because it involves periods of relative stability and certainty, such as during scrums, and periods of great uncertainty and Chaos, such as a succession of quick rucks and mauls.

In the periods of relative stability, such as during a scrum where the friendly side feeds, certainty is gained by the likelihood of retaining the ball and the ability to gain a good perspective of the playing field and the location of the players on it. For a short period of time there is little actual movement on the playing field - the rugby team’s operating environment. When this is the case a team feeding the scrum will generally opt for a command push action based on a planned and rehearsed move. All the players on that side receive their orders from the team captain and they execute a well understood set of activities.

As the play progresses the temporary environmental certainty reduces rapidly as players move around and as the likelihood of play breaking down increases through opposition interference or a mistake in the execution of the move. Generally the play breaks down, developing into a series of rucks and mauls. As the uncertainty increases the tactics change from command push to reconnaissance pull, from being centrally directed to be directed by the player best positioned to carry the play forward, from being a planned move to emergent play, from being functionally organised to being self-organised based around the ability of individual players to support the emerging tactics of the ball handler. The emergent strategy that ensues involves the team with the ball probing the defence, often changing the point of attack, looking for a weakness to exploit. The team is conducting emergent reconnaissance pull tactics.

There is no central control, the captain no longer directs play. The play structure breaks down into hundreds of iterations of order operating close to the boundary of disorder. Players self-organise into effective sub units based on their perspective and ability to support the emerging plan (speed and effect). Fleeting opportunities arise and subside in this rapidly changing environment. In such an environment the great players always “run to the gap”, “position themselves perfectly”, “put their opponents in two minds”, “have lots of time”, and “have great peripheral vision”. They quickly gain a sound perspective of the environment they are operating in, then act with speed to position themselves to maximise their effect, a place where they thrive rather than just survive.

Individual players, sometimes organised at the lowest level by another close by player with a better perspective, automatically position themselves to support the ball carrier and thus, through further iterations of play based on the last immediate iterations of play, develop the emergent strategy further. These iterations based on the start conditions are the “fractals” of rugby. Good training and sound drills can provide the “attractor” effect that helps develop the collective organisational mind that the
military refers to as intent. An attractor is a force which bounds the dynamics of disorder in a non-linear system. (James, 1996, pp.32-33) This play is generally the most creative and effective. It is based on thinking of tactics as a perspective and a position and is done automatically by utilising speed and effect. This is essentially reconnaissance pull, and like warfighting, it will eventually break down into a set piece providing the scope and necessity to revert to a command push play.

In order for the reconnaissance company to operate like the rugby team in open play we must develop the drills and self-organising abilities that allow the company to fit into the battalion’s collective organisational mind. These tools act as an attractor stopping the organisation from breaking down into total disorder, thus providing relative order in a highly disordered environment.

Reconnaissance pull operations will be conducted in an environment of great uncertainty and will therefore need to be more flexible and adaptable than other operations. The basis of the operation is the speed and effect paradigm. Speed enables the reconnaissance force to detect the enemy and act rapidly to generate an appropriate effect. Speed will generally magnify a positive effect.

Command and control of the detail of the operation should not be a matter of great concern as command and control generally produce two negative and unintended consequences. Control is focussed on the friendly force at the expense of the enemy force, and command, through a hierarchical chain of command, takes time creating the potential to miss fleeting opportunities. Focussing on command and control in a fluid and uncertain environment requires greater time, diluting the desired effect, and eventually resulting in a loss of control of the battlefield. It paradoxically results in an unintended “vicious circle” that generates the opposite result to the desired effect (Stacey, 1996, pp. 282-3). The command and control paradigm, which is introspective and slow, gets in the way of rapidly achieving an effect designed to exploit a temporary opportunity in the operating environment.

In order to reduce the time required to initiate action to suit an overall intent and to maximise the desired effect on the enemy a number of contingency based tools have been developed. It must be remembered that eventually the reconnaissance pull operation will switch to command push operations and vice versa. These tools must assist concurrent planning of command push operations, which are based on inputs provided by reconnaissance pull operations. They provide the ability to act automatically in many circumstances and provide a strong indication of the commander’s intent for activities outside the scope of the contingency covered. If communications are lost the organisation retains a very clear indication of the commanders intent allowing it to act automatically without the need for the typical tools of command push operations such as the MAP and detailed orders from battalion. These tools provide the “authority” to self organise with elements outside the company and even though they are “pull” tools, they accept the concurrent use of “push” tools at various levels.

Reconnaissance company elements, once tasked, need to:

- identify who they may be required to provide information to under different conditions,
- identify how to establish communications with the supported organisation, and
- understand the supported commander’s probable information requirement.

This will be achieved by understanding the commander’s intent, formulating a decision matrix, developing a contingency matrix, a command and control matrix, and an information collection plan. All of these tools ensure rapid and automatic action with a speedy transition from one activity to another. These tools replace the MAP for reconnaissance pull operations, although elements of the MAP and available intelligence inputs, will help their development.

Intention. Intention is the “attractor” that prevents this less ordered control system from collapsing into disorder. As the battalion commander awaits the results of reconnaissance to develop a plan the reconnaissance assets need to be given a clear statement of the commander’s broad intent. This is sufficient to commence reconnaissance in an area of operations in support of an intended, yet unspecified, operation. As information is gathered and passed back it is likely that the intention will change. The reconnaissance commander needs to be sensitive to the requirement to change from an overriding intent to a shorter term intent based on specific, but previously unknown, environmental factors. The boundaries given to a reconnaissance sub unit should be taken as indicative only and the need to change them, at short notice, as environmental perspective emerges, must be equally accepted.
Reconnaissance Company is advancing with two Platoons in order to clean an area.

**Decision Matrix.** The reconnaissance company commander needs to be able to develop a decision matrix based on the commanding officer’s intent. This reflects the broad decisions that the commanding officer makes in developing a plan. For example, detection of a dug-in company group location will force the commanding officer to consider certain factors to support the plan. These should be broadly identified in the decision matrix. An example decision matrix, based on two reconnaissance platoons advancing on two approaches, is provided in Figure 5. It is clear from this matrix that the commanding officer wishes to continue the momentum and is prepared to take automatic action for contingencies involving enemy up to company size. The decision matrix indicates what action to immediately take without being prescriptive as to how and when to conduct the action. Furthermore, there is no attempt to try to guess where the activity may occur, rather it identifies activities that may occur somewhere within the area of operations. (Figure 6).

**Contingency Plan.** The contingency plan indicates the intended response to potential events highlighted in the decision matrix, and indicates which assets will be tasked to support an activity. This enables reconnaissance assets to identify elements tasked to support potential operations, allowing them to begin briefing relevant commanders immediately and automatically. This “sanctioned” self-organising replaces the warning order and orders for sub unit commanders. This enables the battle group to generate tempo when conducting reconnaissance pull operations facilitating speed, identifying and automatically tasking the assets required to achieved a desired effect. It also

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<td>7</td>
<td>Ident en coy</td>
<td>1</td>
<td>conduct CTR ident Mor posn / counter pen force to rear</td>
<td>detailed instr TBI by BGHQ</td>
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**Figure 5. Tactical Scenario**

**Figure 6. Decision Matrix**
highlights the need for supporting units to position themselves relative to the reconnaissance force. Thus, for example, C and D company should monitor the locations of the reconnaissance platoons and automatically position themselves, relevant to the platoon, to achieve the time constraints imposed by the commanding officer. Thus battalion movement is truly pulled, and is done automatically without the need for battalion headquarters coordination. Position is determined by the need to operate speedily to achieve the desired effect for a contingency, should it arise. There is no requirement for further orders from above, rather self-organising with identified elements needs to take place to ensure that effect is achieved. All sub units know what is required in various situations and are empowered to “just do it” if necessary (Figure 7).

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<td>Find xing</td>
<td>Recon Coy to mark / post guides / picquet</td>
<td>OC Recon</td>
<td>30 mins</td>
<td>continue adv hand over to Engr when main body arrives</td>
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<td>2</td>
<td>Sect app A</td>
<td>Recon Coy clear - Arty Aval</td>
<td>OC Recon</td>
<td>30 mins</td>
<td>inform BGHQ</td>
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<tr>
<td>3</td>
<td>Pl app A</td>
<td>Coy Atk C Coy - Arty Aval</td>
<td>CO</td>
<td>2 hrs</td>
<td>picquet &amp; commence CTR for C on order</td>
</tr>
<tr>
<td>4</td>
<td>Sect app B</td>
<td>Recon Coy clear - Arty Aval</td>
<td>OC Recon</td>
<td>30 mins</td>
<td>inform BGHQ</td>
</tr>
<tr>
<td>5</td>
<td>Pl App B</td>
<td>Recon Coy Picquet &amp; Bypass D Coy to assume picquet</td>
<td>OC Recon</td>
<td>20 mins</td>
<td>inform BGHQ &amp; OC D Coy</td>
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<tr>
<td>6</td>
<td>En Obs</td>
<td>Sketch &amp; record - call fwd engr recon party</td>
<td>CO (for engr recon)</td>
<td>1 hr</td>
<td>ident wpn sys covering &amp; obs intent</td>
</tr>
<tr>
<td>7</td>
<td>Coy</td>
<td>Commence CTR - ident apps - posn/forces in depth - bypass routes - critical vulnerabilities - COG - obs</td>
<td>OC Recon</td>
<td>6 hr</td>
<td>Specific collection plan TBI on comd</td>
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**Figure 7. Contingency Matrix**

highlighted the need for supporting units to position themselves relative to the reconnaissance force. Thus, for example, C and D company should monitor the locations of the reconnaissance platoons and automatically position themselves, relevant to the platoon, to achieve the time constraints imposed by the commanding officer. Thus battalion movement is truly pulled, and is done automatically without the need for battalion headquarters coordination. Position is determined by the need to operate speedily to achieve the desired effect for a contingency, should it arise. There is no requirement for further orders from above, rather self-organising with identified elements needs to take place to ensure that effect is achieved. All sub units know what is required in various situations and are empowered to “just do it” if necessary (Figure 7).

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</thead>
<tbody>
<tr>
<td>1</td>
<td>Hand over to Engr</td>
<td>Big Dog/OC Recon</td>
<td>Engr in loc</td>
<td>BG Comd</td>
<td>Dark Day</td>
<td>Guide at RV</td>
</tr>
<tr>
<td>1a</td>
<td>Long Rock /BGHQ</td>
<td>Recon dep</td>
<td>BG Comd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Clear en</td>
<td>After Taste / OC Recon</td>
<td>En Cleared</td>
<td>BG Comd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>C Coy atk</td>
<td>Dive Deep / BGHQ</td>
<td>Recon 1 in DS to CCoy</td>
<td>BG Comd</td>
<td>Hard Throat</td>
<td>Mov to Coy net Ident Fwd Bdry for CCoy</td>
</tr>
<tr>
<td>3a</td>
<td>Open Form / BGHQ</td>
<td>Atk complete Recon dep</td>
<td>BG Comd net</td>
<td>Mov to Recon Coy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Clear en</td>
<td>Fast Can / OC Recon</td>
<td>en cleared</td>
<td>BG Comd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Handover Picquet</td>
<td>Cat Moon / BGHQ</td>
<td>D Coy to take over</td>
<td>BG Comd</td>
<td>Last Force</td>
<td>Mov to D Coy net Guide at RV</td>
</tr>
<tr>
<td>5a</td>
<td>Handover complete</td>
<td>Mouse Man / OC Recon</td>
<td>Recon 2 dep</td>
<td>BG Comd</td>
<td>Mov to recon Coy net</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 8. Command and Control Matrix**
Command and Control Matrix. The Command and Control Matrix provides the information necessary to automatically execute a contingency. It generates tempo by ensuring that decisions are executed rapidly and the resultant effect is achieved without recourse to top down orders. It enables self–organising and bottom up initiative to take place in order to achieve a top down intent. This tool replaces orders from battalion headquarters empowering the nominated commander to act automatically within loose, yet defined, parameters.

The Information Collection Plan is prepared by the intelligence cell in consultation with the reconnaissance company commander and the commanding officer. The plan can be amended as required by adding question numbers to the appropriate column. It collects the information required to create sufficient, if temporary, certainty enabling the development of a command push plan based on technically rational tools such as the MAP. (Figure 9).

<table>
<thead>
<tr>
<th>Ser</th>
<th>NAI/TAI</th>
<th>CCIR</th>
<th>Collected By</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>(b)</td>
<td>(c)</td>
<td>(d)</td>
<td>(e)</td>
</tr>
<tr>
<td>1</td>
<td>A01</td>
<td>1,4,5</td>
<td>Recon 1</td>
<td>Snipers avail if required</td>
</tr>
<tr>
<td>2</td>
<td>A02</td>
<td>1,4,6,7</td>
<td>Recon 1</td>
<td>Engr Recon party on call</td>
</tr>
<tr>
<td>3</td>
<td>A03</td>
<td>1,2,3,4,5</td>
<td>Recon 1</td>
<td>Engr Recon Party on call</td>
</tr>
<tr>
<td>4</td>
<td>B01</td>
<td>1,4,5,6</td>
<td>Recon 2</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>B02</td>
<td>1,2,4,5</td>
<td>Recon 2</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>B03</td>
<td>1,2,3,4,5</td>
<td>Recon 2</td>
<td>Snipers avail if required</td>
</tr>
</tbody>
</table>

NAI/TAI (Named/Targetted Area of Interest)
CCIR (Commanders Critical Information Requirement)
Questions: 1 Identify enemy elements
2 Identify enemy specialist weapon systems
3 Identify enemy obstacles/mines/demolitions
4 Identify anti armoured weapon system
5 Identify enemy observation posts
6 Identify armoured vehicle crossing point
7 Confirm state of bridge/ford

Figure 9. Information Collection Plan

Conclusion

This article has outlined a framework for understanding the role of the A21 mechanized infantry battalion reconnaissance company conducting pull operations in a systems context in a dynamic, uncertain environment. It has utilised some concepts from chaos theory to explain how relative order can be temporarily achieved in such an environment and how relative disorder can be created in an enemy’s system. On the battlefield of the future the A21 mechanized infantry battalion reconnaissance company must provide the perspective of the external environment that enables the battalion to adapt to a position in which it thrives. In order to facilitate coordinated activity that targets the firepower of the combined arms battle group against a critical vulnerability, the reconnaissance company must generate sufficient certainty over a short period of time in a certain portion of battlespace. This will enable technically rational decision making processes to be employed to generate a successful battle plan.

The reconnaissance force must simultaneously ensure that the enemy is forced to make plans based on uncertainty thereby increasing the likelihood of failure. To maximise the enemy’s uncertainty and to generate tempo in an emergent strategy, which leaves the enemy searching for a premeditated pattern where there is none, losing time and confusing perspective, the company needs to abandon the command and control paradigm. It must adopt the speed and effect paradigm based on an organic organisational structure rather than that of the machine bureaucracy. Reconnaissance pull must create chaotic instability for the enemy by utilising speed and effect rather than allowing command and control to slow us down diluting the desired effect.

The challenge of understanding a non-linear
battlefield will necessitate changing the way we think about planning reconnaissance pull operations. Hopefully the tools suggested in this article will provide a start point stimulating further exploration of new ideas. Once liberated from the conventional dominant paradigm with which we attempt to make sense of what we observe the possibility to develop new understanding, insights and learning emerges. This article should provide food for thought to further the process of finding a new and better way of doing an old job - reconnaissance.

Special thanks goes to the following members of B Coy (Recon) 5/7 RAR (Mech), Captain A. Bishop, Lieutenant R. Culver, Lieutenant M. Fletcher, Lieutenant E. Orszulak, Flying Officer S. Donaghue, Warrant Officer Class 2, C. Elder, Sergeant S. Francis, Sergeant S. King, and Corporal D. Sheridan who assisted in developing many of these concepts.

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Footnote
As a part of the Army 21 Task Force Trial, 5/7 RAR (Mech) has been tasked to develop concepts for the employment of the Mechanized Infantry Battalion in a Theatre Response Force and Protective Force roles. This article is the result of conceptual work that focusses on possible future operations of the Battalion and is published to keep the wider Army community informed of the direction of thinking within the mechanized infantry component of the Trial.

Major Anton Kuruc graduated from RMC, Duntroon in 1986 with a Bachelor of Arts Degree. He has held a variety of regimental appointments in 2/4 RAR and 5/7 RAR (Mech), and held staff appointments as SO3 and SO2 Media Operations in HQADF. He recently commanded B Company (Recon), and is currently the operations officer of, 5/7 RAR (Mech). He is studying a Masters of Business Administration.
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By Major M. J. Davies, AUST Int.

The ADF had better watch out, there is another RMA coming. Whether the current RMA is over does not really matter. The pace at which technologies and concepts are developing is such that the next RMA is likely to occur early in the next century. Some guide to the speed with which developments in military affairs are occurring can be seen in the development of warfare since the end of WWII. Since 1945, advanced nations have left the period that Heidi and Alvin Toffler call “industrial age warfare”. They have passed through the atomic revolution and are now well inside the electronic and information age. Some forward thinkers are even now suggesting that the next RMA will focus on biological advances in areas such as bio-sensors, neural networks and nanotechnologies.

If the land forces of the ADF are to prepare for the next RMA, they will need to understand the shape and form of the current RMA. To support this understanding process, this article will critically examine the impact of the current RMA on the land forces of the ADF. To achieve this, it will be necessary to briefly consider the shape and form of this revolution. Against this background, the impact of the RMA on land forces doctrine, force structure, command and control (C2) and operations will be examined. This examination will also consider whether the recent Australian Army initiative, Restructuring the Australian Army (RTA), can be seen as an example of the RMA’s impact. As a result of this examination some principles for managing the next RMA can be identified.

An RMA occurs when the pace of the development of new equipment and concepts is so great that it causes a paradigm shift in the application of war. A “paradigm shift” refers to the situation that is created when all of the principle elements of a system are subject to a substantial or complete change. This shift can radically reshape the use and operation of the system. In a military sense this

What is an RMA?

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The current RMA has been described as an “integrated system RMA”. There is no one piece of equipment or concept, rather a series of each coming together. The Tofflers explain that such RMA’s are truly revolutionary as they, “change the game itself, including its rules, its equipment, the size and organisation of the “teams”, their training, doctrine, tactics and just about everything else. It does this not in one “team” but in many simultaneously.” Perhaps the one major constant factor in this RMA, is that it creates, manipulates and exists in a new fifth dimension of war; information. As such, the current RMA can be seen as the military application of Alvin Toffler’s “Information Age” or “Third Wave”. It is
characterised by knowledge based technological advances, a non-hierarchical flow of information and fast rates of change.16

Whilst this RMA is heavily dependant on emerging technologies, its scope is greater than just equipment. The current RMA is characterised by precision strike, improved C3I (command, control, communications and intelligence), Information Warfare (IW), and non-lethality.17 The precision strike aspects of the RMA were dramatically demonstrated during the Gulf War. Coalition jets and smart missiles were able to accurately target and destroy relatively small but critical parts of the Iraqi’s C3I network. Such weapons are seen by many military and political leaders as offering an opportunity to effectively engage the opposing forces whilst minimising “collateral damage”.18 It should be noted that IW also includes non-lethal or “soft attacks” on opposing information systems. These might include the use of computer viruses, directed energy weapons or even psychological operations techniques directed at key personnel.19

The technological concepts of the RMA are also forcing armies to consider broader issues of force structure and doctrine. The battlefield environment that the RMA suggests is one that will demand that armies concentrate more on manoeuvre-oriented forces that produce “massed effects rather than massed forces”.20 Such an environment provides the clear implication of a greater requirement for less rigid application of combined arms and joint service theory.21

Impact on the ADF

The United States was the first nation to recognise the importance of the RMA. In the late 1980s there was a growing realisation of the potential that computer based solutions would have for the conduct of military operations. At that time, however, the US Army’s focus was still directed towards meeting the “industrial age armies of the Soviets in Europe”.22

Accordingly, interest in the RMA was more directed towards technology than concepts. During this period the current RMA was more widely discussed as the “Military Technological Revolution”.23 For the US Army the pivotal moment in the RMA came during the Gulf War. In this conflict technological solutions and operational concepts could be deployed in an almost “test” like situation against a large opposing force.24

As a result of its experiences in the Gulf, the US Army commenced the process of bringing this combination of technology and concepts together. The first major indication of this was the use of RMA based concepts in June 1993 issue FM 100-5 Operations.25 This Field Manual is a very important doctrinal document for the US Army as it is the summary of fundamental operational principles for the field army. This doctrinal development was followed up by the establishment of Experimental Force XXI (EXFOR XXI) in March 1994.26 This brigade sized group was established, in the words of Army Chief of Staff General Sullivan, “to reconceptualize and redesign” the Army.27

The ADF, like most defence forces throughout the world, watched the Coalition’s efforts in the Gulf War with considerable interest. It was not until 1995, however, that discussion of the RMA became widespread in Australian defence circles. Much of the Australian Army’s initial analysis was conducted by Brigadier P. J. Dunn and Colonel P. F. Leahy. The work of these officers built upon US Army thinking but attempted to place the RMA into an Australian context. By 1996, the RMA was gaining such importance in Australian Army thinking that it became the central theme of the Australian Army Chief of the General Staff’s Conference. In an address to that conference, Brigadier Peter Cosgrove, Chief of the General Staff’s Conference. In an address to that conference, Brigadier Peter Cosgrove, noted that the Australian Army must acknowledge the influence that the information age would have on security and national interest concerns. What was important was to develop, “...relevant, sensible outcomes in materiel, organisation and capability terms”.28 The Australian Army’s approach to achieving this outcome was *The Army in the 21st Century Study* and the supporting RTA discussion. The concept behind the RTA is similar to EXFOR XXI, it is a trial of new concepts and organisations.29

Unlike EXFOR XXI, however, the RTA trial effectively involves the whole field army with a number of units and formations being raised, disbanded or re-titled as part of the trial.

In terms of doctrine, the application of RMA discussion and trials has no doctrinal basis. The ADF defines doctrine as, “The fundamental principles by which military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgement in application.”30 The Australian Army’s current FM 100-5 style of pamphlet (Manual of Land Warfare 1.1.2 - Formation Tactics) does not provide these fundamental principles in the implication of RMA technologies and concepts as a determinant of battle. There is, however, sufficient supporting convention. At the strategic level, some policy guidance is provided in...
Defending Australia 1994 (DA 94). This document lists among its highest priorities for defence posture, “the exploitation of technology”. To support this, the Australian Army’s Training Command has identified the requirement for supporting doctrine. It is now developing a doctrinal and training approach that reflects the future battlefield as a principle goal. The RTA document itself could also be considered as an example of RMA doctrine. An examination of its discussion of force models demonstrates many of the concepts of flexibly grouped and oriented force described earlier.

The impact of the RMA has forced the ADF to take steps towards rationalising its C2 procedures. At the highest level, the functions and staffs of the service chiefs have been drastically cutback to allow for greater streamlining of the command process. To carry this process to the operational level, Headquarters Australian Theatre (HQ AST) was recently established as the principal operational level headquarters. In outline, this is sound although the remaining environmental headquarters (Land, Air and Maritime) still exist and duplicate some functions. Such steps have also been supported by the development and fielding of communications and information systems such as the Australian Army Tactical Command and Control System (AUSTACCS), JP 2030 (a common user wide area network) and the Joint Intelligence Support Environment (JISE - formally ADFDIS).

Colonel Leahy, in a paper to the Royal United Services Institute in 1995, argued that to be successful in an RMA environment, ADF land force structures will need to become increasingly more integrated and flexible and less hierarchical. To an extent, the force structure proposed by RTA seeks to achieve this at tactical and operational levels. It has identified a number of options for C2 structures which effectively remove the need for HQ AST to exercise command through a Divisional Headquarters. Instead, HQ AST could directly command a number of deployed Joint Task Forces (JTF). The concept behind these JTF represents an important aspect of force restructuring for the Australian Army. Traditionally arms units (infantry, artillery and armour) and combat service support arms (supply, repair and transport) have operated together under a restrictive command and control groupings. The JTF represent a step towards the RMA as they combine all arms groupings under the direct command of one tactical headquarters. This concept has been described as “embedding forces”.

Whilst the force structure proposed by the RTA clearly shows the impact of the RMA, there is a note of caution that needs to be sounded. Concepts such as the JTF are better suited to larger armies such as the US Army. The Australian Army does not have the personnel, equipment and, more importantly, the logistic assets to support the deployed JTF. Even if it did, restructuring the land forces in such a way may restrict its flexibility to respond to other levels and circumstances of operations. The JTF structures are too rigid to be of any significant use outside Australia in support of a UN operation or higher level conflicts such as the Gulf War. One of the key lessons that the US Army has learned from its RMA experience, is that its operational and tactical structures must be flexible enough to work in low intensity conflicts such as Somalia, as well as higher intensity conflicts such as the Gulf.

Finally, how has the RMA impacted on the conduct of land force operations? The Australian Army has not been involved in any significant operations since the RMA began. It is therefore difficult to make a complete judgement on how well the land forces would fare in an RMA dominated conflict. The scale and intensity of Australian Army involvement in United Nations operations is also too low to be able to make any significant judgements. Conceptually, there are some indications that Australian Army thinking and staff training is in the right area. Brigadier Dunn’s work on the concept of “minimum mass tactics” is clearly embeb with RMA thinking. The Australian Army has also recently introduced a new planning process, the Military Appreciation Process (MAP). The MAP replaces the linear staff planning appreciation format with a more flexible graphical process.

Preparing for the Next Revolution

Overall, the impact of the RMA has been a positive process for the land forces of the ADF. The Australian Army has identified and implemented most of the key processes of the US Army’s experiences within the RMA. Doctrine, whilst lagging, is slowly being developed. C2 structures are being rationalised and made less hierarchical. The force structure although rigid in some aspects, is an improvement on the past. As the land forces understanding of the current RMA matures, a number of areas or lessons that should be heeded for the successful completion of this RMA and in preparation for the next can be identified. These lessons lie in the areas of training of commanders and balancing desire for technology against realistic
The role of the land force commander is critical in an RMA. As in any military circumstance, commanders at all levels must provide the leadership and direction to make the RMA succeed. In the first instance, this will require the training of potential commanders in the implications of operations in an RMA environment. There is a fine balance that will need to be achieved in this training. Whilst commanders must understand the technological requirements of the various systems that they use, they must not be technicians. Again, in the words of Colonel Leahy, “For land commanders, the challenge will be to take advantage of these new technologies whilst at the same time ensuring that they remain part of the battlefield.”

Technology is a particularly tempting aspect of this RMA and will undoubtedly be so for the next. It offers the opportunity to influence battlespaces in ways never previously imagined. Technology, however, is not the RMA nor is it a panacea for all tactical problems. As an Australian example of this, the case of the replacement for the current FA18 aircraft can be considered. The flying life of this aircraft will end early next century and at that time the US Air Force will replace their F18 aircraft with the F22 upgrade. The cost difference between the two aircraft is so vast that it is highly unlikely that the ADF could afford them. Is the type of aircraft, however, the issue? One of the benefits of the RMA is that the aircraft is merely a platform for the delivery of a sensor or weapon. In other words, an inferior and cheaper aircraft may be just as capable of delivering the same sensor or weapon as an expensive one. The Australian balance of technology should concentrate on identifying the important components of a requirement rather than adopting another country’s package.

In the area of future force structure development, Australia must be careful in its application of US RMA lessons. Increasingly, there will be a need to participate in coalition warfare activities with the United States. As such, the Australian Army must be cognisant of this and should provide complementary forces for such operations. This does not mean that the Australian Army needs to become a mini-US Army as was attempted during the 1950s with the “Pentropic Division” structure. The size, backgrounds and functions of both armies are and will continue to be, vastly different. The Australian Army must be selective in its application of US experiences. These experiences do not necessarily translate well into Australian circumstances, the JTF concept within RTA is a good example of this.

The Australian Army needs to be able to look at the technological and doctrinal changes of this RMA and subsequent revolutions and identify the critical areas that it can realistically meet. Toffler notes that, “Diversity is now raised to so high a level that no country can create an omni-capable military.” Within this circumstance, the Australian Army may offer only specialist elements, such as engineer or medical units rather than infantry or armoured units for future coalition operations. Meeting RMA related technologies in these areas is far more cost efficient and useful for the defence of Australia than attempting to fund the high cost of modern weapon platforms. It may also be more useful to the US as “modular coalitions” offer a more efficient division of coalition labour.

The strength of this RMA is that it is an integrated RMA, where the organisational and doctrinal changes are just as important as the equipment. Technological solutions are not always applicable to every land force situation. Recent US experiences in Somalia and Russian experiences in Afganistan are testament to this. Australian land force commanders must also be particularly careful of this when considering the application of RMA methodology on a regional basis. J. Mohan Malik notes that the application of RMA technology and concepts will be uneven across the region. Nations such as Singapore, Taiwan and South Korea should reach RMA levels earlier than China, India, Malaysia, Indonesia and Vietnam because of their technology base.

Added to this is the recent assessment contained in the Defence Efficiency Review that notes Australia is losing its technological and economic edge over its neighbours. Australia may find itself facing the “double jeopardy” of trying to structure defence forces to operate against or with “industrial age” armies such as Indonesia or “information age” armies such as Singapore. Given that regional capabilities play such an important role in determining defence posture, Australian planners cannot afford to lose their technological focus. The structure and capabilities of the Australian Army must reflect the need to meet, match and cooperate within these regional circumstances.
**Conclusion**

The impact of the current RMA on the land forces of the ADF has been significant. At the highest levels of the ADF there is a growing awareness of the need to reshape C2 structures to create a faster and more information intensive environment. Land force doctrine, whilst lagging, is heading in the right direction. Future doctrine is being developed with a view towards placing land force activities within a technologically aware battlespace. Trials, such as RTA, are demonstrating that this doctrinal intent is being matched with operational actions and force structure development.

As the land forces of the ADF approach the end of this RMA, they have a unique opportunity to prepare for the next. Based on the experiences of this RMA, the Australian Army can identify some valuable lessons. The first concerns the need for well trained leaders and operators to lead and manage the revolution. The second, the dangers of applying technology for technology’s sake or to copy the experiences of another army. Equipment must be seen in the context of integrated Australian technological and doctrinal concepts. By applying these simple lessons the Australian Army will be well placed to meet the next RMA.

**NOTES**

9. ibid.
12. ibid.
13. Toffler, The Third Wave, p.29
14. USAC Paper, op. cit. p.7. Air, sea, land and space being the other four.
17. J. Mohan Malik, “Sources and Nature of Future Conflicts in the Asia Pacific Region”, in J. Mohan Malik (ed), The Future Battlefield, Deakin University Press, Geelong, 1997, p.65. The author is quoting from the theorists Steven Metz and James Kievit. IW refers to the engagement of an opposition’s capacity for and system of producing, storing and utilising information.
18. USAC Paper, op. cit., p.7. Collateral damage refers to the accidental but embarrassing damage that can occur to civilian facilities from a strike on a designated military target.
21. ibid.
33. RTA op. cit., Sections 9-11.
36. ibid.
38. RTA, op. cit., p.50.
41. Tilford, op. cit., pp. 2-4.
42. Dunn, op cit.
44. F. P. Leahy, The Future Battlefield, a paper presented to the Command and Staff College, 29 March 1995, p.5.
46. ibid., p.19.
This point was suggested to me by a fellow student at C&SC, Major Tony Luke RAAC.

P. G. Tsouras, Changing Orders, Arms and Armour, London, 1994, p.140. The Pentropic division was an Australian version of the US Army, “Pentomic Division” a five brigade structure designed to operate in high intensity atomic conflicts. The Australian Pentropic Division was structured to fight as a mirror image or component of the US model.

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Other Papers


Major Murray Davies graduated from the Royal Military College Duntroon in 1985 with an Honours degree in history. Since graduation, he has served in a number of intelligence regimental, staff and instructional postings. This article was prepared as a paper for the Masters of Defence Studies programme conducted by Deakin University and is published with their kind permission.
Lessons from the Experiences of Coalition Prisoners of War During the Gulf War

By Lieutenant Colonel Ian Wing, Aust. Int.

Introduction

Thirty-three Coalition service personnel were captured by Iraqi forces during the Gulf War of 2 August 1990 to 27 February 1991. Four of these personnel have written books on their experiences:

- John Peters, a Flight Lieutenant pilot, of XV Squadron, Royal Air Force (RAF),
- John Nichol, a Flight Lieutenant navigator, also of XV Squadron,
- Andy McNab, a Sergeant of 22 Special Air Service Regiment (22 SAS), British Army, and
- Rhonda Cornum, a United States Army Major of the 101st Airborne Division (Air Assault).

This article will discuss these accounts of captivity with the aim of identifying lessons from them.

The article is in five parts:

- the experiences of the PW prior to capture,
- their experiences after capture,
- their experiences of release and repatriation,
- lessons from their experiences, and
- concluding remarks.

The ADF personnel who participated in the Gulf War suffered no battle casualties and none were captured. Nonetheless, ADF personnel are currently deployed in peacekeeping operations in the Middle East where a risk of being taken hostage exists. Recent ADF operations have occurred in third world nations such as Cambodia, Somalia and Rwanda; and future operations in similar environments are likely. If ADF personnel are taken captive PW or hostages in such places, it is likely that they will face similar experiences to those of Coalition prisoners during the Gulf War.

The lessons identified in this article may help them to survive.

Prior to Capture

John Peters and John Nichol

Peters and Nichol were an experienced RAF aircrew and they were flying their first combat in a Tornado GR1 ground attack aircraft over Iraq on 17 January 1991. They intended to drop eight 1,000 pound bombs on the Ar Rumaylahan airfield complex in south-western Iraq.

Their attack went wrong and while jettisoning the bombs they mistakenly flew over an air defence position. They were successfully engaged by an SA-16 hand-held surface-to-air missile. They attempted to control the damaged aircraft but were then hit by ZSU-23/4 radar guided cannon fire and forced to eject.

They descended to the ground by parachute and activated their search and rescue personal locator beacons hoping that Combat Search and Rescue (CSAR) would recover them from enemy territory.

Andy McNab

McNab led an eight man 22 SAS patrol which was inserted by CH-47 Chinook helicopter behind Iraqi lines on 22 January 1991. The patrol was intended to report on the movements of Iraqi SCUD mobile surface-to-surface missile systems from which the Iraqis were launching missiles at Saudi Arabia and Israel.

Soon after its arrival in enemy territory, the patrol was compromised as a result of incomplete planning, poor equipment, bad luck and overwhelming enemy numbers. McNab and the others attempted to evade capture and flee 120 kilometres through enemy territory to sanctuary in Syria.

They were armed with four M203 5.56mm rifle/40mm grenade launchers; four Minimi 5.56mm light machine-guns; and eight M72 66mm disposable rocket launchers. Their tale is one of heroic endurance in extreme weather conditions, and involved several firefights with Iraqi forces, leaving many Iraqi dead.

Of the patrol, three were to die from enemy action or hypothermia, and one successfully reached Syria.
The other four were captured and they then faced the retribution of the Iraqis.

McNab was the last to be captured on 27 January 1991. He was within sight of the Syrian border when he was dragged from his hiding place in a road culvert by angry Iraqi troops.

Rhonda Cornum

Cornum was the Flight Surgeon of 2-229th Battalion and had participated in several 101st Airborne Division operations during the Coalition ground offensive which had commenced on 23 February 1991.

On 27 February 1991, she was scrambled as a member of a battalion medical evacuation sortie in a UH-60 Black Hawk helicopter. They were scrambled because no special forces CSAR helicopters were available to recover an F-16 pilot who had been shot down behind enemy lines. The Black Hawk was escorted by two AH-64 Apache attack helicopters, and carried two pilots, two crew chiefs (door gunners), Cornum, and three pathfinder infantrymen.

Almost immediately after crossing into enemy territory at very low altitude, the Black Hawk was engaged by Iraqi anti-aircraft fire. The door gunners returned fire but the helicopter was severely damaged and crash-landed. The two pilots, one crew chief and two pathfinders were killed in the crash. The other three, including Cornum, were badly injured and pulled from the wreckage by Iraqi Republican Guard troops.

Both of Cornum’s arms had been broken in the crash.

After Capture

Peters and Nichol

Immediately after giving themselves up, Peters and Nichol were punched in the face and searched for weapons. They were quickly stripped of all valuables including their escape funds in gold sovereigns, watches and pens. Fortunately, the Iraqi troops failed to recognise the value of the personal locator beacons which could have been used to lure CSAR helicopters into a trap.

The PWs were placed in a Land Rover and driven away from the crash site and towards the airfield that they had just attacked. Peters expected that they would receive a hostile reception and was aware that their best hope for a successful escape lay in a quick break. But their hands were tied behind their backs and they were too well covered by their guards to jump them and attempt an escape.

On arrival at the airfield, Peters and Nichol were met by Iraqi officers who demanded to know whether they had been mistreated by the soldiers and offered the PWs food and water. They were very cautious and refused the food, suspecting that it might contain drugs. Following a brief session of tactical questioning they were driven to another airfield and received further tactical questioning. They provided only the four approved answers of “name, rank, serial number and date of birth”, also known as the “big four”.

That night they were driven to Baghdad – and for the first time faced Ba’ath Party intelligence service interrogators. As part of the interrogations, they were repeatedly beaten by seven or eight guards. Nichol recalls the onset of “shock of capture”... 

The blood spurting from my nose was thick and grimy on my tongue and teeth. I could not protect myself. They had total control...I’d come from being a significant part of the biggest high-tech military offensive in history to being a speck in a Third World desert. Talk about coming down to earth with a bang....There was no sense of time, it was like being in a black vacuum, seamless and endless.

Peters, equally helpless in the face of this treatment, remembers formulating his mental defence...

They had total control over me. I would only be able to hold out for so long, therefore, physically, I could not win. “I must win mentally,” I thought....I had to believe in my own worth.

They then faced a routine of interrogation and vicious beatings and they initially provided only the big four. The Iraqis employed a series of interrogation techniques – kind, persuasive, sarcastic, knowledgeable and cruel. Eventually the cumulative effects of the beatings forced both prisoners to gradually release information including their military occupation and squadron number. This probably saved their lives as it reduced the severity of the beatings. Fortunately, the interrogators lacked the technical expertise to ask detailed questions and the two prisoners realised that they were starting to gain the intellectual upper hand.

Peters was feeling more confident but learned the hard way that the Iraqis didn’t like him to answer back...

This is where you learn. Under interrogation, you never, ever, get cocky: you never, ever, show open defiance of the interrogator, or let him know that you think he is even the slightest bit stupid.
The savagery of the beatings and professional methods of the interrogators contrasted with the haphazard handling of the prisoners by the guards. The PWs received occasional acts of sympathy and kindness from the guards and were allowed to talk to each other and keep each others’ spirits up.

Peters and Nichol were threatened with execution for war crimes in order to force them to give prepared answers on television and seeing no alternative they agreed to cooperate. Doing their best to show their facial wounds to the cameras they gave the required answers in stilted English knowing that the free world would see that they were acting under duress.

Following the television broadcast, the Ba’ath Party interrogators handed the two prisoners over to Iraqi Army Military Police. They were then properly searched for the first time since their capture six days earlier!

The PWs were then placed in a military prison and the interrogations ceased. Weeks of boredom followed with both men attempting to keep their minds and bodies active, while in virtual solitary confinement.

The boredom was rudely broken by Coalition bombs which hit the prison on 23 February 1991. The cells were badly damaged and the prisoners, now part of a group of about 25 Coalition aircrew and a captured CBS news team, were moved to yet another prison. Several nights of heavy air raids on Baghdad ensued but the second prison was undamaged. The Allies had launched the ground offensive into Kuwait and southern Iraq, and the prisoners’ ordeal was soon to end.

McNab

McNab’s beatings started immediately after his capture. The Iraqi troops laid into him with rifle butts and boots. He recalls his shock of capture in the moments after the first beating:

_They did a rough search – no more than a perfunctory frisk to make sure I didn’t have a gun – then they knocked me to my knees and pushed my face into the mud....I gasped and inhaled mud and blood....All I could hear was hollering and shouting, and the noise of more firing in the air....My head raged with pain....I was a rag doll, a bag of shit._

His hands were tied behind his back and he was thrown into the back of a Land Cruiser. During the ride to the local barracks he was repeatedly butt-stroked and kicked by his guards. But McNab had the benefit of previous conduct after capture training and this enabled him to quickly come to terms with his situation. He was already thinking about survival:

_I exaggerated the limp, shivering and coughing, and moaned every time someone got hold of me. I was in a bad way, but my mental state was good, and that’s the one you’ve got to worry about and conceal from the enemy._

McNab’s equipment, everything from his gold sovereigns to his plastic spoon, were looted by the Iraqi troops. When the gold was discovered, the excited Iraqi officers stopped the body search and took McNab to a private office. This piece of luck enabled McNab to keep his hidden silk escape map and miniature compass.

Beating after beating followed.

_One particularly heavy blow hit me on the jaw....I felt the teeth crack and splinter and then the pain hit me....I tried to spit the fragments out but my mouth was too swollen and numb. I couldn’t swallow. The moment my tongue touched the sharp, tender stumps I passed out._

The beatings were interrupted by tactical questioning and McNab began to introduce his prepared cover story – he was a member of a medical search and rescue team and had no understanding of any military matters. In between the beatings by the guards, the officers attempted to weaken McNab’s resistance by talking about his family and asking him to sign documents which they claimed they would pass to the Red Cross. Independent reports on the treatment of Coalition PWs note that, contrary to the Geneva Convention, Iraq never permitted inspections of the PWs by the International Committee of the Red Cross.

Sometime later, McNab was then driven out of the barracks and made brief eye contact with another member of his patrol, “Dinger”, who was in similar shape.

_The wink and the small smile, that was all I needed. I drew immense strength from that one gesture._

While moving the PWs to another barracks, the guards allowed a mob of local women to attack McNab. He was scratched and kicked viciously and forced to kiss pictures of Saddam Hussein.

McNab used several mental defences to these terrifying situations, including:

- Using his imagination to fantasise about happier times.
- Making a mental appreciation of his situation and planning for his survival.
- Remembering his conduct after capture training and the case studies of successful PWs survival during the Vietnam War.
- Awaiting the respite of the next period of unconsciousness.
Throughout this initial period of captivity, McNab struggled to maintain his orientation with a hope that the opportunity for escape might arise. He remembered the escape map and compass and thought to himself, "...I had the mental edge over them".15

The next vehicle move was interrupted by a Coalition air attack. McNab was keen to use the confusion caused by the attack to make his escape but the opportunity did not arise.

After several hours travelling in the vehicle, McNab arrived in Baghdad and the formal interrogation process began. McNab’s experience of Iraqi interrogation was similar to that of Peters and Nichol. The interrogators preferred violence to subtlety and had little intellectual understanding of the questions they were asking. He was offered food and water as part of an interrogation ploy and accepted them both quickly. After this, McNab was reunited with Dinger and they were able to talk and reinforce each others’ morale. Clearly, the Iraqis were competent thugs but unskilled interrogators.

The next move was to the prison in Baghdad. The walls of the prison cells were marked with bloodstains and inscriptions by previous inmates, some in English. Here the beatings were even more skillfully delivered but McNab was getting conditioned to them, and becoming confident that he would survive. The beatings descended into torture and involved the use of batons; rubber hoses; whips; balls and chains; heated spoons applied to wounds; and violent tooth extractions. The ferocity of the torture increased in retribution for the Coalition bombing of Baghdad and because the inquisitors were convinced that McNab was lying.

A crucial moment was reached eight days after McNab’s capture. He was told that the other members of his patrol would be killed if he didn’t stop lying. McNab decided that he had maintained the cover story for long enough and that no compromise of operational security was now likely. He quickly developed a new, more plausible cover story in which he admitted to being a member of an infantry reconnaissance patrol, but not special forces. Fortunately, the interrogators believed him.

The beating became less frequent and McNab attempted to establish a rapport with the guards in the prison by asking about their families and discussing soccer. He was careful not to antagonise the guards and tried to exploit small advantages such as appealing to their sense of humanity and their enthusiasm for sport.

The three PWs were then moved to a normal prison and were required to be interviewed for a television broadcast. McNab repeatedly pointed with a straight right finger to his wounded eye, knowing that informed viewers would recognise this as a signal. After the interview McNab commenced monotonous prison life, in the same prison as many of the captured Coalition aircrew.

After several weeks of mundane captivity, McNab heard of the arrival of Major Rhonda Cornum and Sergeant Troy Dunlap, from the crashed Black Hawk.

Cornum

Cornum had been in captivity for five days when she arrived at the prison in Baghdad.

She had been marched from the site of the helicopter crash and her personal belongings and equipment were stolen. Her injuries from the helicopter crash included a badly bruised eye, ligament damage to her right knee, a bullet in her shoulder, and a cut on her finger which soon became infected and caused fevers. Rough handling by the guards had also exacerbated her broken arms and the fractures were now displaced. Yet she managed to exchange a smile of encouragement with Dunlap, the surviving pathfinder, before they were loaded into a truck and driven to a nearby headquarters.

Cornum was asked for her name and unit and decided to admit she was from the 2-229th Attack Helicopter Regiment as it was written on a patch on her flight suit. She was searched and her dog tags, patches and wedding ring were souvenired by the guards (thus denying later interrogators these valuable sources of information). They were then loaded back in the truck and moved back to a rear headquarters.

During this move one of the guards untied Cornum and started to undress and kiss her. She was appalled that a man would attempt to sexually assault a seriously injured woman and screamed until he stopped. Cornum was apparently fortunate that the guard feared the repercussions of being caught, and she was not molested again. Peters, Nichol and McNab had all also feared that they would be raped by their guards but, apart from some malicious threats, this did not occur.16

Some of the guards showed some humanity by hand-feeding Cornum and assisting her out of her flight suit and into a more functional robe, which enabled her to use the toilet. But she received no medical assistance whatsoever. Cornum resolved that she would survive this frightening situation:

I was badly injured, perhaps permanently disabled. More interrogations, and maybe torture, lay ahead. I knew we were winning the war, but I didn’t know how long it would last...Still I felt
lucky to have survived the helicopter wreck. I felt lucky just to be alive, and I was confident that I would get out of this mess.\textsuperscript{17}

During a subsequent interrogation, at the Ba’ath Party Headquarters in Basra, Cornum was offered the “opportunity” to be videotaped. But she had seen the earlier television interviews with other injured Coalition PWs and refused.

Later that day Cornum received first aid and some more food. Dunlap was reluctant to eat his food but Cornum sensibly ordered him to do so. Even though badly wounded she was very aware that as a commissioned officer she needed to provide leadership at all times. Cornum found that:

\textit{...you can give up control of your mind, but no one can take it from you. Your captors can torture you and even kill you, but you still have control as long as you can think.}\textsuperscript{18}

They were then moved to a hospital in Basra and reunited with Sergeant Daniel Stamaris, the third survivor of the crash, who had a broken leg. Fortunately, Cornum and Stamaris received proper medical treatment at the hospital. They were quite unaware that the war had already ended two days before!

A move by bus to a prison outside Baghdad followed. Cornum and the others were interrogated once again and Dunlap was beaten for refusing to answer questions. The next move was to a prison hospital in Baghdad and Cornum’s arms were set in plaster. After the operation Cornum was able to examine the walls of her cell and like the other Coalition PWs she saw the inscriptions of many former prisoners. She was concerned that she would also be kept for a prolonged period, perhaps as a hostage, but her fears were eased by the news that she was to be sent home.

\section*{Release and Repatriation}

With the end of the war, on 27 February 1991, the PWs began to receive improved rations, clean prison uniforms and water for washing. Overall, Peters and Nichol were imprisoned for seven weeks; McNab six weeks; and Cornum eight days.

The Iraqi Government denied that the PWs had been mistreated, beaten or tortured. The Iraqi claims were apparently accepted by independent human rights observers and journalists\textsuperscript{19}. But the evidence of these first-hand accounts of Iraqi captivity contradict the disingenuous Iraqi position. There is also substantial evidence of previous systematic mistreatment of western prisoners in Iraqi prisons, and by Iraqi-sponsored guerrilla organisations operating in Lebanon.\textsuperscript{20}

On 6 March 1991, the Red Cross facilitated the handover of the PWs at a bustling photo session in Baghdad. They were then flown out of Baghdad, the British to Amman and the Americans to Riyadh. Reception teams, experienced in handling Middle Eastern hostages, processed the former PWs. Extensive medical tests were conducted and counselling was provided to counteract post-traumatic stress syndrome.

Ultimately the PWs were repatriated, rejoined their families and restarted their normal lives.

\section*{Lessons}

The experiences of Peters, Nichol, McNab and Cornum provide many useful lessons.

The avoidance of capture, and if captured, immediate attempts at escape and evasion, are the best way to avoid the hardships of imprisonment as a PW. McNab and the other members of his patrol fully appreciated these facts and this can be seen in their epic attempts to evade capture and escape to Syria.\textsuperscript{21} McNab demonstrated his determination to overcome enormous odds, and in so doing, the high quality of his escape, evasion and resistance to interrogation training.

On the other hand, there is no point throwing one’s life away and Peters and Nichol understood this when they decided to surrender rather than face almost certain death from overwhelming numbers of Iraqi troops.

If capture seems likely, personnel must not allow documents or maps to fall into enemy hands. Unit identities are a typical information requirement of interrogators and, to deny this information, unit patches such as Cornum’s should be avoided. Personal compromise will also occur if letters or other personal details fall into the hands of captors.

Once captured, it is important that PWs avoid categorisation and selection as useful sources of information. PWs should appear to know as little as possible and “play the grey man”. McNab understood this principle and insisted that he was an ill-informed medical orderly. Peters and Nichol could not pretend to be other than aircrew but fortunately their interrogators had no technical knowledge and were unable to exploit them as a source of intelligence.

The accounts show that PWs will generally experience a process of hasty tactical questioning
followed by a series of increasingly detailed interrogations. These will probably be accompanied by a series of administrative moves from the location of capture, through a variety of holding locations, leading ultimately to a PW camp. This process will tend to disorientate the PW but they must strive to maintain their orientation and awareness of their surroundings – this is important to the maintenance of morale.

The experiences of the captives also show that it is best for PWs to persist with the refusal to answer questions other than the big four unless dire circumstances force another course. McNab demonstrated that feigning fatigue and playing on injuries assisted in this resistance.

All of the PWs provided moral support to each other. A grim smile, a wink, or if blindfolded a touch on the arm, may help another PW to resist. The PWs were also able to keep a little of their sense of humour and were occasionally able to see a funny side to their situation.

Some of the guards showed some sympathy for the PWs and were occasionally kind and helpful to them. Any opportunity to gain an advantage should be seized by PWs, and McNab played on the guards’ humanity with shared interests such as family life and sport.

Food and water should be accepted. The risk posed by the possibility of drugs will generally be lower than the risk of dehydration or lack of food.

PW held in third world countries will probably be beaten and possibly subjected to torture or threats against themselves or others. The *Geneva Convention* may be held in contempt in such circumstances and may not provide protection to PWs. The use of a gradual release of information (noting that its usefulness as a source of intelligence perishes with age) or a convincing cover story may buy time or placate captors, McNab, Peters and Nichol expected to be mistreated and they were proved right.

Cornum’s situation was unusual because she was severely wounded and this probably saved her from beatings and deliberate torture. Nevertheless, she was given no first aid for two days, in contravention of the *Geneva Convention*.

Finally, imprisonment in third world countries is likely to involve unsanitary conditions as these are often the norm for third world civilian prisons. The PWs understood this threat and did their best to maintain their health and hygiene to reduce this serious threat to survival.

Vice Admiral Stockdale, a United States Navy pilot who endured eight years of mistreatment at the hands of the North Vietnamese, contends that “...prisoners of war grow to live on honour and self-respect.” He is a believer in the principle of only willingly divulging the big four, but understands through personal experience that a controlled release of information may eventually be necessary. He believes that “...compliance extracted by brute force is in no way as spiritually damaging as that given away on a mere threat”.

### Conclusion

Each of the PWs also learned personal lessons from their captivity and they concluded their books with discussions of these lessons. Peters believes that the experience of captivity has made him more attentive to his family and less preoccupied with his work. Nichol is now less argumentative and lives life to the full as if it might end any day. McNab now never takes anything for granted and is less bothered about minor inconveniences. Cornum gained a better appreciation of her family, her local neighbourhood and her country. Overall they all gained a new perspective on the value of life and the importance of surviving.

The most compelling lesson which can be drawn from the experiences of these Coalition PWs is that survival is almost always possible.

Vice Admiral Lawrence, who survived almost six years as a PW in North Vietnam, advises service personnel to prepare themselves for the possibility of capture in three ways:

- Undergo conduct after capture training, including an introduction to types of mistreatment and interrogation; and the use of cover stories and deception.
- Maintain a high standard of physical fitness, which may overcome physical deprivation and unhealthy conditions.
- “*Have faith in yourself, your fellow PW, your country, and your family.*”

Peters, Nichol, McNab and Cornum proved that the danger, pain, loneliness, hardship and misery of imprisonment can be overcome. Their accounts of their imprisonment in Iraq in 1991 have provided us with a wealth of lessons in PW survival.

### NOTES

LESSONS FROM THE EXPERIENCES OF COALITION PRISONERS OF WAR DURING THE GULF WAR

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7. ibid, pp.124-125.
8. ibid, p.150.
11. McNab, Bravo Two Zero, op cit, p.175.
12. ibid, p.191.
15. ibid, p.211.
17. McNab, Bravo Two Zero, op cit, p.251.
18. ibid, p.203.
23. loc cit.

Lieutenant Colonel Ian Wing is a qualified military interrogator. He underwent, and was responsible for, conduct after capture training while posted to the Special Air Service Regiment. He is a graduate of the Royal Military College, Duntroon, and Command and Staff College, Queenscliff. He holds a Bachelor of Arts (Honours) and Master of Defence Studies, for which he received the 1995 Master of Defence Studies Prize. He was awarded the 1996 Chief of the General Staff Essay Prize and is currently conducting part-time research towards his Doctorate in Australian defence planning. Lieutenant Colonel Wing is currently the Acting Director Joint Intelligence Staff of the Defence Intelligence Organisation. He has been awarded the 1998 Chief of the Defence Staff Scholarship and will study full-time at the Defence Academy and overseas.
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The Road to Basra: Did the Gulf War Coalition Violate International Humanitarian Law?

By J. A. Yates, WA State Emergency Service

Introduction

In 1990 and 1991 an unlikely coalition of Arab and Western nations joined forces under the banner of the United Nations to militarily oppose the Iraqi occupation of Kuwait and, eventually, to forcefully evict it.

Towards the end of the military action against Iraqi forces, the Coalition attacked a mass of Iraqi soldiers fleeing along the road from Kuwait to Basra. The attack caused many Iraqi deaths and injuries and raised questions about its legitimacy under International Humanitarian Law.

This article examines the question of whether International Humanitarian Law was violated by the Coalition when its forces attacked and decimated the Iraqi Army retreating on the road to Basra.

To undertake the examination, the article first presents an outline of the history of Iraq and Kuwait and a brief history of the Gulf Conflict, reviewing its origins, conduct and command structure. The article then reviews relevant International Humanitarian Law and its applicability to the conflict. Discussion of the Law and the facts of the case leads to the conclusion that while a violation of the Law may have occurred, and an absolute answer cannot be given on this, enforcement action is unlikely. This is because firstly, the nation directing the operation on behalf of the United Nations has not ratified the most powerful element of the Law and hence its personnel are not liable to it; and secondly, because the victors in a conflict rarely prosecute their winning commanders.

Iraq and Kuwait – A Brief History

As the origins of the Gulf War in 1990/91 stretch back to the beginning of this century and beyond (Cipkowski, 1992), it is important to present a brief history of Iraq and Kuwait.

Iraq has its origins in ancient Mesopotamia where its capital, Baghadad, was the centre of a glittering Arab world (Moushabeck, 1991). Absorbed into the Ottoman Empire in around 1500, Iraq declined relative to Europe (Moushabeck, 1991). With the dismemberment of the Ottoman Empire at the end of the First World War, Iraq was occupied by Britain under a League of Nations mandate. The British installed a monarchy and in 1932 Iraq joined the League of Nations as “an independent state under British protection” (Moushabeck, 1991, p.27).

In 1958, internal tensions exploded in revolution. King Faisal II was assassinated and was replaced by a military dominated Revolutionary Council (Moushabeck, 1991). The revolution did not provide stability. Successive violent changes of power took place until in 1979 Saddam Hussein seized power in a bloody struggle with other members of the ruling Ba’ath Party (Cipkowski, 1992).

In 1980, seizing on internal disruption in Iran, Saddam’s armies invaded Iran with a primary aim of occupying the Shatt al-Arab waterway to provide landlocked Iraq with better access to the sea (Moushabeck, 1991). The invasion rapidly deteriorated into a bloody stalemate with neither Iraq nor Iran able to achieve a decisive victory. After six years and 750 000 Iraqi dead, Iraq and Iran accepted a cease-fire and the war ended. Iraq was left with an effective army but with enormous foreign debts of over US $80 billion, it was effectively bankrupt (Freedman and Karsh, 1993).

Kuwait, according to Fattah (1991), has a cultural, social and political history distinct from Iraq. Formed from a network of trading relationships in the Persian Gulf in the 17th century, it was closely associated with the other Gulf states of Bahrain and Qatar. Iraq did not exercise political control over Kuwait (Fattah, 1991).

Kuwait’s establishment as a legal entity dates to 1922 when the British High Commissioner in Iraq issued the famous “lines in the sand” decree: he would decide where the borders between Iraq, Kuwait and Saudi Arabia would be (see Fattah, 1991, p.45 and Cipkowski, 1992, p.8). Control of Kuwait was given by the British to the ancient ruling Sabah family, which retains power to this day (Cipkowski, 1992). In 1961 Kuwait became an independent nation with immense oil based wealth (Cipkowski, 1992).
The Gulf Conflict

Iraq never accepted the “lines in the sand” and since 1922 has made frequent attempts, mostly diplomatic, some military, to take control of Kuwait (Cipkowski, 1992). In 1961, for example, Iraqi troops massed near the Kuwait border in what Cipkowski (1992), describes as a dress rehearsal for the 1990s Gulf War. In 1961, however, British troops in Kuwait forced an Iraqi backdown.

By the end of the 1980s, the scene was set for another confrontation between the two nations. Saddam Hussein, leader of a bankrupt nation with a large and well-equipped army, was desperate. Although Kuwait supported Iraq with loans during its war with Iran, in 1990 it was less willing to assist. Kuwait refused to grant extensions to the loans or reduce oil production to raise Iraqi oil export income through higher prices (Freedman and Karsh, 1993). Saddam devised a strategy to invade Kuwait and seize control of two vital assets: its coastline, giving greatly improved access to the sea; and its immense oil wealth. Ultimatums were issued by Iraq demanding limits on oil production, to be rejected by Kuwait in July 1990 (Freedman and Karsh, 1993).

On 2 August 1990, Iraq invaded Kuwait, deploying overwhelming force: 140 000 troops and 1 800 tanks; within a day Kuwait was occupied and under the control of Iraq (Freedman and Karsh, 1993). Many observers believed that Saddam fully intended to invade Saudi Arabia as soon as Kuwait was consolidated (Friedman 1991). This belief was based on the enormous size of the forces used by Iraq (Freedman and Karsh, 1993).

The international response to the invasion was swift. By the end of the day, United Nations Security Council (UNSC) Resolution 660 condemned the invasion and sought the immediate withdrawal of Iraq’s forces (Freedman and Karsh, 1993). Saddam’s misreading of the international response has been attributed to his holding a distorted view of the world in general and the West in particular coupled with a belief that pan-Arab loyalties might prevent other Arab nations moving against him (Friedman 1991). Freedman (1991 p.18) notes that Saddam’s perception of the West was based “on a series of disconnected caricatures” and knowledgable Iraqi diplomats “had little desire to face the consequences of disagreement”.

Other action followed quickly. Operation Desert Shield was put in place through deployment of United States and other forces to Saudi Arabia to forestall any further Iraqi advance, while UNSC Resolution 661 placed a trade embargo over Iraq (Cipkowski, 1992).

When these actions failed to force withdrawal from Kuwait, UNSC Resolution 678 was passed in November 1990 demanding Iraq’s withdrawal by 15 January 1991 (Cipkowski, 1992). As the deadline approached, a coalition of United States, British, French and other nations, including Arab forces, built up in Saudi Arabia. Eventually 695 000 troops, 1 660 aircraft and 145 warships from 31 nations participated (Cipkowski, 1992).

On 17 January 1991, the Coalition opened the air offensive against Iraq, swiftly and overwhelmingly gaining complete control of the air over Iraq (Cipkowski, 1992). The land offensive started on 24 February 1991 and lasted for 100 hours, ending with the total defeat of Iraq’s forces (Cipkowski, 1992). At midnight on 27 February a cease-fire came into effect with the unconditional surrender of Iraq (Freedman and Karsh, 1993).

As defeat loomed, Iraqi soldiers fled Kuwait City by whatever means of transport they could seize. Thousands of men in assorted military and civilian vehicles packed the road from Kuwait City to Basra in Iraq, jamming it as they streamed north. This movement was known, as the Coalition had intercepted an order for the retreat (Freedman and Karsh, 1993). Reconnaissance aircraft seeking information in poor weather on 25 February 1991 were fired upon by Iraqi troops on the Basra Road. The Coalition Air Commander then ordered air attacks on the Iraqi forces on the road. These attacks continued on 26 February and, in better weather, inflicted heavy casualties against virtually no opposition (Freedman and Karsh, 1993). Freedman and Karsh (1993 p.403) note that Coalition operations on the Basra Road resembled a “blood sport” where the Iraqis were given no opportunity to surrender. Casualty estimates vary from Niva’s (1991) tens of thousands of Iraqi troops killed to Freedman and Karsh’s (1993) estimate of under 1 000. The forces involved in the attacks were almost exclusively US and the command structure that issued the attack orders was exclusively US (Freedman and Karsh, 1993).

The command arrangements used by the Coalition during the conflict are important to further consideration of whether International Humanitarian Law was breached. These arrangements and the legal structure they operated within are discussed below.

The basic authorisation for military action stems from Article 42 of the United Nations Charter that permits the use of force to restore peace and security.
This article was put into effect by UNSC Resolution 678, passed by the Security Council on 29 November 1990. The resolution authorised the use of military force by member states to remove Iraq from Kuwait. The United States provided most of the forces assembled by the Coalition: 61 per cent of the land forces, 75 per cent of the air forces and 45 per cent of the naval forces (Cipkowski, 1992). As a consequence, the United States dominated the command structure (Cipkowski, 1992). The Commander in Chief was US General Norman Schwartzkopf, his primary land force commander was US Lieutenant General Yesock, Lieutenant General Horner commanded the air forces and US Vice Admiral Arthur was the naval commander.

This section of the article examines the international law relevant to the Gulf Conflict. It does so through a brief discussion of what constitutes international law, then takes a more detailed look at International Humanitarian Law.

International law has two separate and distinct elements, private and public (Hewison 1989). Private international law relates to litigation between individuals and companies in the international arena and is not further considered. Public international law governs the conduct of relations between states and it is this form of law that is of interest.

Unlike municipal law, international law is characterised by being consented to by the states concerned (Glahn, 1992). Glahn’s (1992 p.3) definition reads:

“International law is a body of principles, customs, and rules recognised as effectively binding obligations by sovereign states and such other entities as have been granted international personality.”

Nations generally comply with international laws they have consented to out of mutual self-interest, as each benefits from the stability and predictability this provides in their relations with each other (Glahn, 1992).

One of the primary means of making and gaining consent to international laws is through the drafting, signing and ratification of treaties between states, either on a bilateral or multilateral basis (Glahn, 1992). Treaties can both recognise existing customary practice, giving it the status of law, and also create new international law. Protocols are used to amend treaties – when signed they have the same force as a treaty (Hewison, 1989).

Customary law is the other main source of international law (Glahn, 1992). Customary law is similar to British Common Law in that it is a set of rules that have developed over time and been generally accepted to the point where they are obligatory on all states.

Ratification is an important aspect of international law that needs consideration. Although a state may participate in the drafting of a treaty and its representatives at the treaty conferences may sign the treaty, it has no legal force on the state until the state ratifies the treaty (Hewison, 1989). It may also need to enact suitable municipal legislation to put the international law into effect.

International Humanitarian Law is a sub-set of general international law. It stems from two broad streams of international law that have recently become effectively combined into a single body of law (Thorogood, 1996). Hague Law, or more accurately the Hague Conventions of 1899 and 1907, was established to codify the rules and customs of war that had developed over many centuries (Glahn, 1992). The 1907 Hague Conventions introduced the important concept that belligerents did not have an unlimited right to injure an enemy, although no sanctions for breaches were established (Thorogood, 1996). As Hague Law developed from customary law, it is binding on all states (Glahn, 1992).

Relevant extracts from Hague Law (ICRCa, undated) with respect to the Gulf Conflict are:

**Article 22**

The right of belligerents to adopt means of injuring the enemy is not unlimited.

**Article 23**

In addition to the prohibitions provided by special Conventions, it is especially forbidden –

(c) To kill or wound an enemy who, having laid down his arms, or having no longer means of defence, has surrendered at discretion;

(d) “To declare that no quarter will be given.”

The Geneva Conventions form the second stream of law. Aimed at ameliorating the condition of sick and wounded combatants, the first Geneva Convention came into effect in 1864 as a result of the experience of a Swiss citizen, Henry Dunant, who was horrified at what he saw at the Battle of Solferino in 1859 (Thorogood, 1996). Subsequently, the Convention was expanded through successive iterations into the four 1949 Geneva Conventions. Convention I deals with sick and wounded combatants, Convention II with sick and wounded
combatants at sea. Convention III with the treatment of Prisoners of War and Convention IV with the protection of civilians from hostilities (Thorogood, 1996). The 1949 Geneva Conventions do not have the status of customary law and apply only to states that have ratified them (Glahn 1992).

The relevant extract from Geneva Convention I (ICRCb, undated) with respect to the Gulf Conflict is:

**Article 3**

In the case of armed conflict not of an international character ... each Party ... shall ... apply, as a minimum, the following provisions:

1. Persons taking no active part in the hostilities, including members of armed forces who have laid down their arms and those placed hors de combat by sickness, wounds, detention, or any other cause, shall in all circumstances be treated humanely.

To this end, the following acts are ... prohibited:

(a) violence to life and person.

**Article 49**

The High Contracting Parties undertake to enact any legislation necessary to provide effective penal sanctions for persons committing, or ordering to be committed ... grave breaches.

Each High Contracting Party shall ... search for persons alleged to have committed, or to have ordered to be committed, such grave breaches, and shall bring such persons ... before its own courts.

**Article 50**

Grave breaches ... shall be those involving any of the following acts, if committed against persons or property protected by the Convention: wilful killing, torture or inhuman treatment ... wilfully causing great suffering or serious injury to body or health, and extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly.”

Article 3 is of interest in that it only applies to hostilities that are not international. It is likely, therefore that it would not apply to the Gulf Conflict (Thorogood, 1996).

At end of the 1950s, the International Committee of the Red Cross (ICRC) sought revision of the Geneva and Hague laws, citing inadequacies in both bodies of law (Glahn, 1992). The Conference of Government Experts convened by the ICRC drafted Protocols I & II additional to the Geneva Conventions. The Protocols modernised the four Geneva Conventions and incorporated the Hague rules of war into a single body of law (Jakovljevic, 1982). Protocol I governs the conduct of international conflicts, while Protocol II governs internal conflicts (Kewley, 1984). Both Protocols came into effect on 7 December 1978 (Glahn, 1992). Thorogood (1996) reports that by 1994 Protocol I had been ratified by 135 states and Protocol II by 125; Australia has ratified both. The United States ratified neither and is therefore not bound by them. As Protocol II does not relate to international conflicts, it will not be further considered.

The reason that the United States failed to ratify either protocol was because of US concerns in the early 1980s that Protocol I could be interpreted as giving legitimacy to organisations such as the Palestine Liberation Organisation and other liberation movements that were viewed as terrorists by the US Government (Meron, 1994).

The key provisions of Protocol I that relate to the Gulf Conflict are (ICRC, 1977):

**Article 1**

2. In cases not covered by this Protocol or by other international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience.

**Article 35**

1. In any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited.

**Article 40**

It is prohibited to order that there shall be no survivors, to threaten an adversary therewith or to conduct hostilities on this basis.

**Article 41**

1. A person who is recognised or who, in the circumstances, should be recognised to be hors de combat shall not be made the object of attack.

2. A person is hors de combat if:

(a) he is in the power of an adverse Party;

(b) he clearly expresses an intention to surrender, or

(c) he has been rendered unconscious or is otherwise incapacitated by wounds or sickness, and therefore is incapable of defending himself; provided that in any of these cases he abstains from any hostile act and does not attempt to escape.
**Article 43**

1. The armed forces of a Party to a conflict consist of all organised armed forces... that are subject to an internal disciplinary system which, *inter alia*, shall enforce compliance with the rules of international law applicable in armed conflict.

**Article 52**

2. Attacks shall be limited strictly to military objectives ... limited to those ... which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralisation, in the circumstances ruling at the time, offers a definite military advantage.

**Article 85**

3(e) Attacks on persons *hors de combat* are grave breaches of the Protocol.

5. Grave breaches shall be regarded as war crimes.

**Article 87**

1. The High Contracting Parties and the Parties to the conflict shall require military commanders, with respect to members of armed forces under their command, to prevent and, where necessary, to suppress and to report to competent authorities breaches of the Conventions or of this Protocol.

3. The High Contracting Parties and the Parties to the conflict shall require any commander who is aware that subordinates under his control are going to commit or have committed a breach of the Conventions or of this Protocol, to initiate such steps as are necessary to prevent such violations, and, where appropriate, to initiate disciplinary or penal action against violators thereof.”

Protocol I, vide Article 90, allows for the establishment of a Fact Finding Commission to investigate grave breaches of the Protocol. Thorogood (1996), however, points out the general ineffectiveness of such bodies in bringing perpetrators to justice at the international level. Lamb (1994) comments that the effect is to leave the punishment of war crimes mostly in the hands of the states through their domestic legislation. This implies that each state will punish its own personnel for violations, an infrequent occurrence (Thorogood, 1996).

Meron (1994) notes that although the United States has not ratified Protocol I, its concepts and language have been used in training manuals prepared and used by the US military.

Discussion of whether the Coalition breached International Humanitarian Law focuses on three key points: did International Humanitarian Law apply to the Conflict, and if it applied was the attack on Iraqi forces on the Basra Road a grave breach, and finally what can be done to sanction offenders if a grave breach has occurred?

To examine the application of International Humanitarian Law to the Gulf Conflict, it is first necessary to discuss the legal status of the Coalition and its action to enforce UNSC Resolution 678. Waddell (1994) identifies two different types of peace-enforcement action by the United Nations. The first type is where military operations are under the control of the United Nations Military Secretariat using armed forces allocated to it by member states. In this case, the armed forces are an integral part of the United Nations and assume its legal identity. The United Nations becomes responsible for actions taken by such forces.

The second type of peace-enforcement is where the United Nations authorises member states to take military action on its behalf. In these cases, the forces retain their national legal identity and have no legal linkage with the United Nations. The states providing the forces retain full responsibility for them (Waddell, 1994). Waddell (1994) notes that this category clearly applied to the Gulf Conflict where UNSC Resolution 678 authorised member states to remove Iraq using force if required. The member states, therefore, become responsible for actions taken during the conflict. In particular, military commanders are responsible for preventing breaches of humanitarian law from occurring and for taking action if they occur (Thorogood, 1996).

Given the above, it appears that whether International Humanitarian Law applies depends on whether the Coalition states had ratified Protocol I, in which case it applied, or if the provisions of the earlier 1949 *Geneva Conventions* and Hague Laws applied. While many of the states had ratified Protocol I, the state that provided the bulk of the forces and the command structure, the United States, had not. With respect to the attack on the Basra Road, as the forces involved were almost exclusively US, Protocol I essentially did not apply.

Other sources of International Humanitarian Law did, however, apply. The United States has ratified the four 1949 *Geneva Conventions* and is subject to the customary laws of war codified in the *Hague Conventions* of 1899 and 1907 (Smith, 1994 and Thorogood, 1996). Both of these prohibit unlimited warfare and require that persons *hors de combat* not be attacked (Kewley, 1984), although the *Geneva Conventions* only apply to non-international conflicts (Thorogood, 1996).

Because Protocol I contains a definition of *hors de combat*, at Article 41, unlike the 1949 *Geneva
Conventions and Hague Law, the discussion below uses Protocol I as the reference point. The conclusions drawn, however, refer to the United States’ obligations under the Geneva Conventions and Hague Law.

Although the definition of hors de combat in Article 41 of Protocol I appears to exclude Iraqi forces on the Basra Road because they had not surrendered and were attempting to escape, there is a body of opinion that includes combatants in their situation as hors de combat. Lamb (1994) believes the laws of armed conflict include a prohibition against unnecessary loss or suffering generally. Article 52 of Protocol I supports this view with its limitation of attacks to targets that offer a military advantage. Few could argue successfully that slaughtering fleeing Iraqi forces on the Basra Road offered the Coalition any significant military advantage as the enemy forces were unable to offer any resistance on the last day of the war. Banter (1988) presents a similar view, arguing that attacks must be limited to those who use or threaten to use force. While the Iraqi forces on the Basra Road on the day of their discovery did offer some resistance, on the last day they were quite unable to do so. Therefore, they were no longer combatants and were protected from attack as hors de combat. Chediac (1992) specifically claims that this was the case and that the Coalition violated International Humanitarian Law.

Further, Freedman and Karsh (1993) note that the fleeing Iraqis on the Basra Road were not given any opportunity to surrender, thus potentially violating Article 23 of Hague Law that prohibits orders preventing the taking of prisoners.

It must also be noted, however, that writers such as Freedman and Karsh (1993), claim that the Coalition did gain military advantage in attacking the retreating Iraqi forces as they had weapons and the potential to offer resistance. They also point out that the casualty numbers in the tens of thousands quoted by the media and writers such as Niva (1991) have not been borne out by investigation. Accepting a level of error, Freedman and Karsh (1993) quote Iraqi casualty figures of under 1 000 on the Basra Road.

The question, therefore, of whether the attack on retreating Iraqi forces on the Basra Road was justified by military necessity or if it was a grave breach of International Humanitarian Law remains open to debate. The generals in charge of the operation clearly believed that it was necessary and appropriate, although they recognise the one-sided advantage held by the Coalition (Freedman and Karsh, 1993). Other writers, such as Niva (1991) and Chediac (1992) are firmly of the view that the attack had no military necessity and was against troops out of combat offering no resistance. If the views of Freedman and Karsh (1993) are accepted, then no breach took place. If the views of Niva (1991) and Chediac (1992) are accepted, then a breach did take place. The writer is of the view that, on balance, the military necessity for continuing the attack was not present: there was no resistance and the Iraqis were retreating. The attacks, therefore, were probably breaches of Articles 22 and 23 of the 1907 Hague Convention, Article 50 of the 1949 Geneva Convention I and Articles 1, 35, 40, 41 and 52 of Protocol I.

This leads to the question of which element of International Humanitarian Law applies. As the Coalition was acting on behalf of the United Nations, the application of International Humanitarian Law is on the basis of which treaties the Coalition states had ratified. As the United States provided the command structure and the forces attacking the Iraqi Army on the Basra Road, it is the treaties and customary law that apply to the United States that must be considered. The United States has not ratified Protocol I, therefore it only needs to comply with the Hague Laws of 1907 (as customary law that applies to all belligerents) and the 1949 Geneva Conventions (that it has ratified). If it is accepted that the attack breached one or both of these, it is then necessary to consider what sanctions exist to punish breaches.

The Hague Laws of 1907 do not contain any provisions for sanctions when breaches occur (Thorogood, 1996), therefore there is little that can be done in any legal sense under their ambit to punish transgressions during the Gulf Conflict.

The 1949 Geneva Convention I, at Article 49 (ICRCb, undated), requires that signatories take whatever municipal action is necessary to enforce the provisions of the treaty and to punish violations. In the case of the Gulf Conflict, this would require the United States to take punitive action against its senior commanders for ordering the attacks. This has not taken place. It is suggested that it is highly unlikely to take place as the victors in war rarely prosecute their successful generals!

Perhaps in recognition of this problem, in 1992 the United Nations General Assembly passed a declaration that United Nations peacekeeping forces would comply with the requirements of all international conventions applicable to military operations (Waddell, 1994).

Conclusion

Did the Coalition violate International Humanitarian Law when it attacked Iraqis retreating on the road to Basra? It must be acknowledged that this is open to debate, although the writer believes
that the Coalition did breach the Law when the attacks were continued against an obviously defenceless and retreating enemy.

If the Law was breached, the lack of effective sanctions in the Hague Laws and the 1949 Geneva Convention I, however, make any enforcement action very unlikely. For such action to succeed, the United States would have to prosecute its own senior commanders and this is not considered credible. Had Protocol I been ratified by the United States, and hence applied to the conflict, then another avenue for action against the commanders would have existed. Protocol I allows for the creation of International Fact Finding Commissions that can investigate allegations of breaches and make recommendations for further action. This may or may not have taken place had it applied.

It is, perhaps, a brutal fact of war that the victors are usually able to determine who is or is not prosecuted for war crimes. It is unlikely that the United States would permit its senior commanders from the Gulf Conflict to be prosecuted for actions that cannot be demonstrated, beyond doubt, to be grave breaches of International Humanitarian Law. International Humanitarian Law remains, therefore, lacking in effective enforcement. It is not impossible, however, to imagine situations where military commanders from nations that have signed the Protocols, such as Australia, could find themselves liable for prosecution for breaches of International Humanitarian Law during operations similar to the Gulf War. The need for all such commanders to be conscious of their obligations under International Humanitarian Law, therefore, remains important both from a legal and a humanitarian viewpoint.

Ratification of Protocols I and II by the United States would, to an extent, provide a mechanism to prevent recurrence of the events on the Basra Road. Ratification would provide a formal enforcement mechanism that is currently absent when US military forces are involved. Ratification would also send a powerful signal that the United States, the pre-eminent superpower, was committed to complying with International Humanitarian Law and its limits on the use of force (Meron, 1994).

**BIBLIOGRAPHY**


Julian Anthony Yates is an Executive Officer with the Western Australian State Emergency Service. From 1976 to 1982 he was an Air Traffic Control Officer with the RAAF attaining the rank of Flight Lieutenant. Since leaving the RAAF he has worked in a variety of jobs including various State Emergency positions with the Western Australian Government. He was seconded to the Police Department Policy Unit from November 1989 to May 1990 and as a Hazardous Substance Coordinator with the Department of Occupational Health and Safety from February to September 1992. Julian was invited to speak at the 1993 Disaster Management Conference in the United Kingdom where he presented two papers which were subsequently published.
Book Reviews


Reviewed by Wing Commander Ric Casagrande

Lieutenant Colonel Kelly has produced an important contribution to the continuing debate on the value of peace operations and how they should be conducted. He has drawn widely on his experiences as an ADF operations lawyer to provide a comprehensive work on the dilemma facing military planners who while trained for war fighting are increasingly being called upon to restore and maintain peace, often in impossible situations. In addition, this book draws on the wealth of material that has already been published on peace operations and can be appreciated because of the obvious research that is apparent in the text. That said, the book is not an easy Sunday afternoon read. It is designed for the serious scholar and military planners who may be confronted with the dilemmas of peace operations.

The critical questions addressed by the book include: What is the role of the military in peace operations? What is the authority for these operations? What are the lessons of past peace operations? and How can we best prepare the ADF for its future contributions to international peace and security? To do this the book first examines the history of peace operations, then moves on to discuss the legal regime which is applicable to such peace operations and finally conducts a case study of one of the more difficult peace operations – Somalia. It is in this latter section that the book really comes alive as it depicts the experiences of the ADF contingent in Somalia as part of UNITAF and UNOSOM II. The success of the Australians in Somalia becomes apparent as Lieutenant Colonel Kelly recounts incidents from his time in Somalia. While the ADF can be justly proud of its effort in very difficult conditions in Somalia: the failure of the UN and international community generally to built on such success is a modern tragedy.

The work and high standard of conduct of the Australians described in the book stands in stark contrast to recent allegations about the criminal actions of some members of other national contingents, which has been widely reported in the Australian and international media. These allegations of torture and ill treatment of Somalis by Canadians, Belgians and Italians emphasise the importance of the rule of law in all military operations. Kelly’s book also makes this point clearly and it provides a template on which ADF doctrine can be formulated. Such doctrine would be the basis for an ADF “peace” capability, arising from the formation of ADF civil affairs unit. Such a capability would do much to enhance Australia’s ability to contribute to international attempts to alleviate the suffering being endured by people all over the world.

All in all, a book that should be read by those who have a general interest in operations law and peace operations, and must be read by those tasked with the planning and conduct of ADF peace operations.


Reviewed by Major Darren Kerr

Economics was one of those subjects, like physics, which I could never quite grasp at high school. Not surprisingly, I therefore approached The Future of Capitalism with some reservations; expecting a heavy academic slog full of incomprehensible economic jargon. What I found instead was a very enlightening, if occasionally turgid, read by one of the leading economic scholars in the United States. Lester Thurow is MIT Professor of Management and Economics and is a widely read author whose books include The Zero Sum Society, The Zero Sum Solution and Head-to-Head: The Coming Economic Battle Among Japan, Europe and America.

The theme of The Future of Capitalism is neatly captured by Thurow’s own words:

“The eternal verities of capitalism – growth, full employment, financial stability, rising real wages – seem to be vanishing just as the enemies of capitalism vanish. Something within capitalism has changed to be causing these results. Something has to be changed to alter these unacceptable results if capitalism is to survive. But what is “it”? And “how” can “it” be changed?”

Thurow draws on the two concepts of “plate tectonics” from geology and “punctuated equilibrium” from evolutionary biology to analyse the
dynamics of capitalism in the 20th century. Using the first concept, which deals with the shifting plates of the earth’s surface, he examines in detail the “economic plates” which are fundamentally altering the accepted realities of capitalism. These “plates” include:

- The failure of communism.
- The ascendency of man-made brainpower industries.
- Changing demographics.
- The creation of a global economy.
- The multipolar world which lacks a dominant economic power.

Thurow devotes much of the book to analysing the “fault-lines” of these various plates by examining how these fault-lines are reshaping capitalism and what the next iteration may look like. He poses many questions, although not always providing the answers, and this reflects his deliberately provocative approach.

Thurow’s second concept of punctuated equilibrium refers to the evolutionary biology theory of those periods when evolution occurs very rapidly. The relatively quick emergence of mammals during and after the extinction of the dinosaurs is an example. In Thurow’s conceit we are now in a period of punctuated equilibrium in which ideological, economic and social changes will be radical and rapid. Only those who have an eye on the distant future will be able to make the changes necessary to become “economic mammals” and adapt to the new environment.

Thurow argues his case in a very succinct and convincing fashion, understandable even for a reader with only a limited knowledge of economics (and geology and biology). Thurow’s aim is not to present a pessimistic picture of the future of capitalism. Rather he sets out to chart the uncertainties and problems which lie ahead for capitalist societies as a means for individuals, corporations and nations to be able to navigate safely through the dangers and emerge at the head of the game.

It is, in the final analysis, a book of hope. According to Thurow, the threat to capitalism is stagnation not implosion. It will be those who hang tenaciously to the past who will be the dinosaurs threatened with extinction. Those who can adapt to change, in fact adopt change as a normal state, will find a time of enormous opportunity emerging. There are interesting parallels in this book for the Australian Army as we face a period of global uncertainty and begin the challenge of restructuring the Army for a new century. We must approach change management as mammals and not dinosaurs.

Those still reading this far may fear that this is a heavy academic text of little relevance to military officers. I can only say that this is far from the case. National security is underpinned by the interplay between the forces of economic prosperity, social equilibrium and political stability. Threats to a nation are not always military ones and it behoves us all to remain aware of those non-military threats which may pose the greatest risk in the 21st century. For this reason alone it is a very worthwhile read.

IN SEARCH OF A MARITIME STRATEGY: The maritime element in Australian defence planning since 1901, $24.00. Available from Strategic and Defence Studies Centre. Edited by David Stevens.

Australia is and always has been a maritime nation. From the earliest days of European settlement, the people of Australia have looked to the sea for their security. Protection was first provided under the umbrella of Imperial Defence and the Royal Navy. Later as our nation matured, the need was identified to establish a local navy, manned and commanded by Australians.

However security is not found in one environment alone and in the years since Federation there has been a continuing struggle to reconcile differing perceptions of threat, competing defence strategies, conflicting force structure priorities and economic and political constraints. Australia’s unique geographical situation provides both security and vulnerability, and in seeking either to exploit or protect these features defence planners have had to continually adjust to the realities of the day.

This book brings together leading authorities from Australia and overseas and for the first time comprehensively examines our nation’s search for an effective maritime strategy in the 20th century. Illuminating both the similarities and differences between eras, the volume provides a succinct overview of Australia’s changing maritime priorities and the evolution of broader strategic planning. The insights gained will be of benefit not only to those interested in defence history but also to all those concerned with current issues in Australian security strategy.
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