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The Royal Australian Navy has just signed a three year Standing Order with Fuji Xerox (Australia) for the installation on 49 ships in its Fleet of the newly released digital “Able Series” of copiers. Over 100 copiers will be installed into the Fleet, and due to the fact that they are modular in design, they can be easily fitted into confined spaces. Ranging from 22 ppm to 32 ppm, the new digital range of copiers maintain a high reliability rate which is extremely important on ships within the Fleet.

In addition to the copiers being fitted, each ship will have up to two trained Technical Officers who are capable of maintaining the equipment whilst at sea. They have provided them a three month and six month deployment kit of spare parts and toner/drum kits to last for lengthy periods of time.

Mr John Brinson – Materiel Manager (Victualling) Branch at Naval Support Command – says the “selection of the Xerox digital copiers was due mainly to their increased reliability, their flexibility and the fact that they met all environmental conditions which is important in closed quarters.”

“The Service Contract/Standing Offer for three years was arranged only after a tendering process for those DAS suppliers with the demonstrated knowledge of the RAN’s unique requirements and with the capability to supply the service and equipment. That Xerox was selected demonstrates the skills, capability and commitment to the RAN of Xerox which will no doubt be reinforced through the successful liaison between Xerox and the RAN in the years to come. An important factor was that the Contract was awarded for the service factor and not just the supply of the equipment” says John Brinson.

The copiers have a standard CRU (Customer Replaceable Unit) which contains the toner and drum. The CRU’s are common to all model Able Series copiers installed in other ships which simplifies training and supply holdings of the fully sealed units.

Any CRU’s that are collected by Xerox are to be re-manufactured and for each unit collected, Xerox donates $5 to LandCare as part of a four year sponsorship deal totalling $800,000. In addition, each customer received a $10 credit for each unit collected for re-manufacture.

The reliability factor of the units is vastly increased due to the ‘scan once - print many’ concept. The original documents are scanned into Abies 10mb of memory and printed directly from memory using Xerox laser printer technology. One other feature that makes the digital Xerox copies more acceptable for the Fleet is the fact that the Upper Scanner/Automatic Document Feeder is a separate unit to the processor and can be moved to a distance of up to two metres away allowing for greater flexibility in installing the units.

All machines fitted also have duplex (double sided) capability thus the vessels will generally have to carry less paper which will be a significant saving in weight carried on board. Added to this the low noise of the machines, the automatic low power facility (in most cases 115 volt machines were fitted) and higher quality reproduction using XBIT (Extra Brilliant Imaging Technology) will enhance reproduction on board vessels in the future.

About 50 of the new copiers have already been installed in various ships in the Fleet with another 50 or so to be installed in the next 1 to 2 years.

Based mainly in Sydney, Perth, Cairns and Darwin, the fleet ranged from DDG’s, Mine Counter-measure vessels, THSS’s, Landing ships, Patrol Boats and Auxiliary Oiler Replenisher’s. 34 non-metropolitan Service Centres around Australia will service any of the Fleet when required and an International listing of Service Centres has been provided to each vessel and they can be contacted via a 1 800 Help Desk telephone number here in Australia.

John Brinson says “with RAN’s knowledge of future requirements, these digital units are now capable of being upgraded to also allow for laser faxing and laser printing from the same units purchased – thus becoming true multifunctional devices which will allow for future enhancements to allow savings in terms of space, time, efficiency and resource savings”.

The National Defence Account Manager for Fuji Xerox (Australia) Mr Nigel Colyer says that “the initial site surveys conducted by Fuji Xerox on many vessels prior to the Tender being submitted highlighted the tight conditions under which officers operate on board and that the flexibility of the new digital machines made it an easier installation than would have been possible with normal analogue machines”.

He further says “the fact that we spent a large amount of time and effort in identifying sites and speaking with the users on board the vessels allowed Fuji Xerox a greater understanding of the physical situation and made the recommendation for digital models far easier.”

As a follow up to the successful winning of the tender, Xerox was invited to attend the last RAN Environment and Energy Conference which was held at HMAS Stirling in Garden Island WA. This event allowed Xerox to further expand on its International and Australia initiatives in environmental practices. Ms Heather Pavitt – Xerox’s Consumables Business Manager – attended the conference. Heather is one of two full time employees of Xerox Australia who manage all aspects of Xerox’s Environmental Programs.
NEW XEROX
DIGITAL RANGE
OF COPIERS WITH
FACSIMILE AND
PRINTING OPTIONS

Reliable
If you want to fix a problem you have to first understand what causes it. In the case of copiers, it's a fact that most service calls are due to:
- Poor Copy Quality 33%
- Originals Misfeeding 21%
- Paper Misfeeds 26%

With this in mind, The Xerox R&D team developed the new Able Digital copier. With Digital, every copy is a first copy (like a laser printer), and the once-only original scan, plus electronic collation, virtually eliminates those misfeed problems.

Able is the copier that re-define reliability.

Affordable
Offering you world class technology is pointless if it's not affordable, and that's where Able scores again.

We know the reliability built into Able Digital copiers and have priced it for your workplace. Able gives you hardcopy documents with the quality your work demands and they are available on Federal Government contract.

That's Able affordability.

Remarkable
Digital innovations like the single-scan original feeder and memory based electronic collation, together with options like a heavy duty fax and printing capability, make the new Able range one of the most sought after. And to prove it, in only a few short months, Xerox Able has captured 50% of the Japanese market. But because of the world wide demand, stocks are limited, so phone 13 14 12 to arrange a simple, obligation free demonstration.

You'll find the Able range of digital machines really are remarkable.
BIBLIOGRAPHY

Injury in the Army

Dear Editor

The article “Injury in the Army – Need for Change” contained no surprises for the ex-Regulars of the Regular Defence Force Welfare Association (RDFWA) who have handled claims on behalf of hundreds of serving Regulars in NSW.

Unfortunately the situation is worse than that described by Lieutenant Colonel Rudzki. His article does not include soldiers who have been injured during sporting activities who have claimed under the Veteran Entitlement Act.

These soldiers have made no claim under ComCare (MCRS) thus the claims would not appear to have influenced the statistics.

RDFWA counsellors have found that 80 per cent of claims under the VEA stem from sporting injuries. Of course, we old Regulars worry about the adverse effects on endurance and toughness when reducing basic physical tests and activities.

Colonel JS Haynes (RL)
For JB Snow
Commodore RAN (Rtd)
President
Regular Defence Force Welfare Association

Darts at War

Dear Editor

I am currently undertaking post-graduate research into the social history of darts and have recently turned my attention to the part played by the game during this century’s conflicts and particularly, but not exclusively, the Second World War.

I would like, through your publication, to ask your readers whether or not they have any particular memories of darts which would be of use to my research. As a result of letters that I have published in journals in the UK, I have already heard of some wonderful stories of how darts provided ideal entertainment for passing long hours “on watch” and even one or two from ex-POWs where the game helped keep them sane during those desperately difficult times. Where a proper set of darts was not available I am told of darts being fashioned out of pins and feathers and dartboards out of trees or rolled corrugated paper. I’ve heard tales too of raucous darts nights in the desert, under canvas with the dartboard hanging from a tent pole.

I know that many of the allied force were unaware of the existence of the game of darts until they were introduced to it either whilst stationed in Britain, serving in the various theatres of war or confined as POWs. I would like to hear from anyone who was introduced to the game in this way. Perhaps you took it home with you?

No newspapers or magazines can afford me the kind of first-hand information I believe I can obtain from your readers. I would be grateful if you could publish this request in a forthcoming issue. Would readers, please, send any information they would like to share with me to Patrick Chaplin, 50 Norfolk Road, Maldon, Essex CM9 6AT, England.

Many thanks in advance for any help that is given.

Darwin 1942

Dear Editor

I wish to say how refreshing it was to read the article “Darwin 1942” by Air Commodore AD Garrison in the Jan-Feb 1997 Journal.

I had carried out limited studies of the Darwin raids as part of promotion examinations many years ago and also came to the conclusion that the Japanese raids were to neutralise port and airfield facilities being used by an enemy.

They were not the fore-runner of an invasion of Northern Australia, as so many people thought then, and indeed still believe today.

The absolute disorganisation by the Officers in charge is highlighted, as is the fact that Darwin and its people were left terribly exposed by the Government to a situation which any good Officer must have appreciated.

It is to be hoped that the article will make clear the real situation to those who read it. If any reader “skipped” the article, but reads this letter, I urge you to return and learn.

Keep up your high standards.

George Mayes
Major-Retired
THE DEFENCE REFORM PROGRAM

The Defence Reform Program will be a dynamic process over the next few years that will deliver a more flexible and capability focused Defence Organisation that can protect Australia into the 21st Century. Based on the findings and recommendations of the Defence Efficiency Review, the reforms will revitalise the Defence Organisation and sharpen its focus on combat capability.

Defence’s purpose is to provide highly capable military forces to protect Australia. There are no identified potential threats at present, but the Defence Organisation must be structured so it can fight a war, and it must adapt to peacetime conditions.

The Defence Reform Program will improve the speed and quality of decision making in Defence by eliminating duplication, streamlining administration, reducing layers of bureaucracy and creating a more corporate approach to decision-making.

Implementing these reforms will require commitment and vision to create a more efficient and effective organisation that can redirect more resources to enhance training, increase readiness and modernise and strengthen combat capabilities to keep pace with strategic and military circumstances.

Key Defence Reform Program initiatives include:

- Defence administration will increasingly focus on supporting the combat elements of the Australian Defence Force. This involves a cultural change away from a pre-occupation on managing current activities, cash and inputs and towards a focus on Defence’s key output, developing and maintaining highly capable combat forces.

- The size of the Defence Headquarters will be cut, and the numbers of committees and senior ranking military and civilian positions reduced to speed up decision-making and reinforce lines of responsibility and accountability.

- Recognising the fundamental importance of the Chiefs of Navy, Army and Air Force, the Service Chiefs will have greater responsibility in overall Defence policy development. The single Services will remain as separate entities with the Chiefs in command of their respective Services.

- Command responsibilities will be made clearer, with operational headquarters amalgamated. New directives will be issued to the Chief of the Defence Force and Secretary of Defence and by CDF to the Service Chiefs.

- An integrated joint Defence Headquarters developing policy and providing advice to all Defence managers.

- Acquisition functions will be collocated and reorganised into groups focusing on common industry sectors or equipment types (eg surface ships, aircraft and related systems, communications) rather than divided by Service.

- Support and administrative functions will be consolidated and duplication cut to maximise efficiency. This includes base logistics, engineering support, officer education, common technical training, personnel management, estate management, and regional and base support.

The focus of the redirection of savings to combat capabilities will be addressed in a Strategic Review to be handed to Government later this year. A number of priorities, in no particular order, are obvious;

- acquisition of airborne early warning and control aircraft;
- increasing the weapons and sensor capability of the Navy’s surface fleet;
- implementing the plan for Restructuring the Australian Army with helicopter and ground transport;
- modernising the F/A-18s and F-111s;
- exercising and operations;
- training and readiness; and
- adequate remuneration to Defence personnel for demanding work.

The task ahead offers both challenges and opportunities for all Defence personnel, who will be asked to embrace important changes and continue to contribute to finding ways to improve the effectiveness of Defence.
An Introduction to Battlefield Command Systems

By Lieutenant Colonel M. J. Ryan, RA Sigs.

Introduction

The success of a commander depends heavily on his ability to acquire information, prepare and disseminate plans, and then control their execution. This is the business of command and control which, on the modern battlefield, has become increasingly dependent on reliable communications and effective information systems. In this article, these communication and information systems will be considered in the context of command systems.

The demands placed on these command systems have increased dramatically in recent years. Developments across all fields of military technology have greatly increased the tempo of operations as well as the volume of information that must be processed and delivered across the battlefield in a timely manner. Command systems must provide commanders with timely, accurate information, presented in an appropriate form.

This article introduces battlefield command systems by providing an overview of the command and control (C2) cycle and the technologies and systems that support it.

Terminology

Command and control are inextricably linked and the subject is too broad for detailed study here. Therefore we will not dwell on the plethora of definitions of command and control but will settle for the following working descriptions.

Command. Command is perhaps best described as the authority vested in an individual for the direction, coordination and control of military forces.

Control. Control is the means by which command is exercised. In a simple organisation, the commander does most of the controlling himself; in a more complex headquarters, most of the control functions are delegated to his staff. Control involves: analysis of requirements, allocation of resources, integration of effort, direction, coordination, and monitoring.

Other Terminology. Perhaps more than in any other field of military endeavour, the topic of command and control has spawned many variations in terminology, for example: command and control (C2); command, control and communications (C3); communications and information systems (CIS); command, control, communications and intelligence (C3I); command, control, communications, computers and intelligence (C4I); or the most recent contribution is C4ISR, meaning command, control, communications, computers, intelligence, surveillance and reconnaissance. Most of these particular terms can be justified by their emphasis on a particular vital part, or parts, of the C2 Cycle. For example, without surveillance and reconnaissance a commander is blind; without communications he is isolated, and so on. However, it is important not to get too caught up in semantics. This article simply considers the C2 Cycle and brings together all of the systems that support it into the generic term – command systems.

Command and Control

Command systems support command and control, that is, they support the C2 Cycle illustrated in Figure 1.

The C2 Cycle is also called the Decision Cycle, the OODA (OUDA) Loop (for the elements of observation, orientation (understanding), decision and action), or the Boyd Cycle after the retired US Air Force Colonel John Boyd who pioneered the concept.

The key elements of the Cycle are:

- STA. Whilst the cycle is continuous, it can be considered to start with Surveillance and Target Acquisition (STA), or observation. The commander receives a wide range of information from the many sensors and systems deployed, such as: ground-surveillance radar; movement sensors; UAV; reconnaissance patrols; strategic systems; and so on. Since this information is reported in digital form, the rapid increase in the number of sensors and surveillance systems is predominantly responsible for the explosion in digital transmission requirements on the modern battlefield.
Communications, Surveillance and Target Acquisition

Communications

Fig 1. The C2 Cycle

- **Communications.** Surveillance data can only reach the commander if effective, survivable communications systems are available from the sensor system through to the data processing facility. The rapid growth in sensor and weapon systems means that communications planners are always struggling to provide systems with sufficient capacity.

- **Information Processing or Orientation or Understanding.** The sensor information coming into the headquarters must be filtered and displayed in an appropriate format for the commander or his staff to take action on it. Automation of this process (and use of artificial intelligence techniques) is essential as the volume of information grows. By the year 2000, it is estimated that a divisional commander will have available to him something in the order of 1,000 times the information that he would have had in 1980.

- **Communications.** High-speed data networks and voice communications must be provided within a headquarters to facilitate the data processing and decision functions.

- **Decision Making.** The commander then makes a number of decisions and finalises his plan.

- **Communications.** Orders are then conveyed to subordinate units through high-speed data and voice networks.

- **Action.** This is the business end of command and control, and the C2 Cycle must assist the commander to take effective action based upon a correct appreciation. However, since few plans last longer than H-hour, the cycle must continue and information begins to flow to support the new operation.

- **Communications.** The commander must then control the action of subordinate units and task STA assets to monitor operations. Note that communications appears four times in the loop, confirming its importance as a key part of the C2 Cycle. Without communications on the modern battlefield the commander is deaf, dumb and blind.

The key to winning on the battlefield is the ability to carry out this process more quickly than the enemy. We will return to that point shortly. But first, we cannot leave discussion of the C2 Cycle without noting its heavy reliance on the electromagnetic spectrum.

**Dominating the Electromagnetic Spectrum**

It is evident from the preceding discussion that movement through the C2 Cycle on the modern battlefield depends heavily on the use of the EM spectrum, whether for surveillance and target acquisition, passage of information, processing of information or destruction of enemy forces. This reliance is a vulnerability that must be exploited in enemy command systems, while being protected in
own-force systems. Operations to counter the C2 Cycle are termed information warfare (IW). What is precisely meant by the term has yet to be agreed universally and, again, proper treatment is beyond the scope of this article. However, Figure 2 illustrates why domination of the EM spectrum is critical.

The Operational Environment

To be successful on the modern battlefield, commanders and their staff must be able to move through the C2 Cycle faster than any adversary. Since modern warfare depends on tempo, lethality and survivability, command systems need to be agile and responsive to changes in threat. They also need to cope with the influx of huge amounts of information from intelligence and surveillance systems, both tactical and strategic. In recent conflicts, this has overloaded tactical communications systems as well as the manpower-intensive intelligence process and made it extremely difficult for the commander to process and analyse information in a timely manner. The implementation of automated battlefield information systems offers the only viable solution to

process information and to prepare and disseminate plans within a realistic time frame.

On the modern battlefield, the operational environment will be defined by four major trends:

- increased volume, lethality, range and precision of fire;
- greater dispersion of more mobile units;
- smaller, more-effective units, due to better integration of technology; and
- greater invisibility and increased detectability.

These trends will dramatically affect the nature of future operations. Decisive results will be able to be achieved by smaller, widely dispersed units that will be able to acquire targets and generate large volumes of accurate fire at much greater ranges than is currently possible. This will not only change the way armies are organised and trained, but will significantly affect the way they are commanded and controlled. In particular, the modern battlefield will be characterised by the commander's ability to conduct simultaneous actions.

Due to the limited range of primitive weapons and communications systems, early battles were generally fought on relatively thin battle fronts behind which commanders were generally free to re-deploy their forces. Wars became more two-dimensional as the

Figure 2. The Effect of IW on the C2 Cycle
extended range of artillery began to limit a commander's freedom of movement behind the front lines. The third dimension was added by aerial interdiction. Doctrine for operations in this three-dimensional battle space was developed and refined during the Cold War, including the US AirLand Battle and the NATO Follow-On-Forces Attack (FOFA) doctrine.

However, the ability to operate in three dimensions is not sufficient, since actions are invariably still sequential. That is, plans are generally phased with one phase starting as another finished. A command system must assist the modern commander in two important aspects: to conduct multiple simultaneous actions to paralyse the enemy, as well as to move through the C2 Cycle to deal with multiple simultaneous threats.

Command Systems

A command system consists of a set of procedures (manual or automated) to support a commander and his staff in their implementation of the C2 Cycle. The key elements of a command system are:

- the commander;
- his staff;
- doctrine and procedures;
- reconnaissance and STA systems;
- communications; and
- information systems.

These elements are interdependent and it should be noted that, whilst technology plays a major part in supporting the C2 Cycle, the success of command systems cannot rely entirely on technology. Arguably, the most important influence in the process is the human element of the commander and his staff, as well as the preparation of appropriate doctrine and procedures. While maintenance of a technological edge is vital, most command and control failures of this century have resulted from human mistakes rather than a lack of technology.

Still, technology must play a significant role in the support developed to allow commanders to navigate the C2 Cycle faster than an adversary. Information systems and technology are expected to improve a thousand times in the next 20 years and will greatly increase the scope, volume, accuracy and speed of information available to commanders. In fact the rate of advance is already so great that it has rendered inadequate our procurement and materiel management processes for communications and information systems, but that is another story and well beyond this article. The following sections focus on the communications and particularly the information systems required to support the C2 Cycle.

Military Communications Systems

The function of a military communications system is to provide the communications required for effective command and control in a hostile electromagnetic environment. Over many years, a tactical communications system has evolved with two sub-systems:

- **Trunk Communications Sub-system.** Trunk communications link headquarters and provide the majority of the communications required by commanders and staff with facilities for voice, data, video, facsimile and telegraph. Within the Trunk Communications Sub-system there are three major types of means by which information is passed: radio (including satellite communications); line (including fibre optics); and hand carriage (SDS).

- **Combat Net Radio Sub-system.** Trunk communications are complemented by highly mobile and flexible combat net radio systems used by fighting troops to provide lower-capacity circuits, both from headquarters to combat units, and within combat units.

Battlefield Command Systems

Information systems (or computers) exist in many locations on the battlefield and many have roles to play in the C2 Cycle. However, this article concentrates on those systems provided to support the Information Processing and Decision Making half of the C2 Cycle.

The automated component of the command system provides the commander and staff with the means to support the C2 process across the range of military operations through the ability to complete the following tasks:

- **Data Understanding** (the processing and synthesis of raw data into descriptive information);
- **Situation Analysis** (the analysis of information to infer environmental descriptions);
- **Planning** (the formulation of alternative courses of action);
• Decision Making (selection of appropriate courses); and
• Communication (exchange of information between functional areas within a headquarters, with other headquarters, and between headquarters and subordinate units).

These areas are not mutually exclusive and often overlap due to the iterative nature of the command and control process.

The ideal command system has a number of key attributes. It:
• provides seamless communications from the lowest tactical level through to strategic level headquarters;
• allows rapid exchange of target data from sensor to weapons system and between weapon systems;
• ensures that a piece of data is only entered once and does not have to be re-typed;
• allows rapid fusion and display of information to commanders at all levels;
• provides a common view of the battlefield in real time (situational awareness);
• enhances the commander’s ability to concentrate combat power effectively and decisively to deal with multiple simultaneous actions;
• permits the commander to command and control on the move;
• provides multi-level security access; and
• can be used both within barracks and during tactical deployment without having to be re-configured.

Having considered what constitutes a battlefield command system, the following section examines suitable architectures for their implementation. Focus is placed on the communications and particularly the information systems required to support the right-hand half of the C2 Cycle (Information Processing and Decision Making), as illustrated in Figure 3.

A suitable architecture for a battlefield command system will vary depending on the size and function of headquarters supported, but Figure 4 shows a generic configuration.

There are three main issues that need to be considered in the design of the architecture illustrated in Figure 4:
• information processing architecture;
• information storage architecture; and
• communications architecture.

Each of these is discussed in more detail in the following sections.

Information Processing Architectures

There are two main options for the provision of information processing support in a battlefield command system:

![Figure 3. The Data Processing and Decision Making Half of the C2 Cycle.](image-url)
Centralised Processing. In this option, a powerful central processor unit (CPU) provides the processing power for the entire headquarters or functional area. Staff officers on the network use relatively limited terminals, utilising the power of the CPU. Figure 4 illustrates a couple of examples of this arrangement in the top two functional areas. The disadvantages of centralised processing include a single point of potential failure and a heavy network communications requirement.

Distributed Processing. Both survivability and communications requirements can be eased by distributing the processing away from the central processor to provide significant processing power on each staff officer's desktop. There is therefore no single point of failure and communications requirements are considerably reduced. This architecture is modified somewhat in modern command systems by implementation of a client-server architecture, but the philosophy remains.

Information Storage Architectures

Information is stored in databases. There are three broad options for the provision of databases to support battlefield command systems:

Local Databases. In this option, each headquarters holds only the information pertinent to it. Whilst the data is most likely to be physically replicated or distributed in a number of places within the headquarters, each headquarters' database is logically separate. Information is shared between headquarters through the transmission of formatted messages. The AUSTACCS database architecture is an example of a local database (albeit replicated within the headquarters). The disadvantage of this option is that there is no inherent common view of the battlefield since each headquarters has a different database at different points of time. Situational awareness is therefore very difficult to achieve without placing a considerable burden on the trunk communications network to ensure that a headquarters updates all other headquarters every time it modifies its own database. In a corps or divisional deployment, the local database option is therefore not acceptable although, in the deployments envisaged in northern Australia, the AUSTACCS architecture is sufficient since AOs are widely dispersed and effectively independent. However, with formations in closer proximity, more efficient architectures are required.

Replicated Databases. The first major technique employed to ensure a common view of the battlefield was to provide all headquarters with the one common database, located somewhere on
the battlefield. To ensure that the central database is survivable against physical attack and communications outages, it is normally replicated in a number of locations. One of the copies becomes the "master" database and the others become "slaves". All updates are completed on the current master, which ensures that slave databases are updated regularly. If the master database is destroyed or cut-off, one of the slaves becomes the master and the process continues. This technique was employed by the first major battlefield command system, WAVELL, deployed by the British Army in the early to mid-1980s. The disadvantage of this technique is the very high communications overhead required to ensure that all replicated databases are synchronised.

- **Distributed Databases.** A more favoured architecture in modern civilian and military databases is the distributed database architecture, in which data is distributed amongst headquarters with the intention of reducing the communications overheads required to support information transfer. Particular portions of the database are distributed such that the unit that has the most regular need for the data stores that data locally, so as to minimise the amount of access to it across the trunk network. For redundancy, data is also replicated at least locally, although critical information is replicated in a number of locations. The advantage of the distributed database architecture is the provision of a common view of the battlefield, with the least drain on sparse trunk communications.

**Communications Architectures**

The provision of communications is critical to the success of command systems. These communications take two main forms.

- **Trunk/CNR Communications.** As illustrated in Figure 4, trunk communications are essential to receive information, transmit orders and to control operations. Note that for redundancy and survivability, each headquarters will have more than one connection to the trunk network. Access to the facilities of the trunk network is provided to mobile subscribers by the Single Channel Radio Access (SCRA), called the Radio Access Unit (RAU) in some networks. The trunk network is interfaced to the combat net radio sub-system by the Combat Net Radio Interface (CNRI). CNRI is provided in all modern networks; SCRA is provided in most except PARAKEET.

- **Internal Communications.** Internal data network communications are also required within a headquarters to facilitate data processing and decision making. Figure 5 illustrates the roles of these two types of communications.

![Diagram](image-url)

**Figure 5. Communications Requirements of the C2 Cycle.**
The critical communications issue in most networks is capacity. Modern fibre optic networks within headquarters operate at around 100Mbps, which is currently sufficient to interconnect the local area networks in functional areas, which operate at data rates of around 10Mbps. However, a major bottleneck occurs when information is required to be transferred between headquarters across the tactical communications system. The capacity provided by the combat net radio sub-system is 2.4kbps at best for HF and 16kbps for VHF. The trunk communications sub-system currently provides 16kbps per channel, or if all channels can be aggregated on a trunk link (not always possible), 256kbps or 512kbps is possible. To illustrate the inadequacy of the current tactical communications system to cope with interconnection of headquarters networks, Figure 6 shows capacity of the various networks as being proportional to physical size.

Figure 6 demonstrates that the tactical communications systems provides a considerable bottleneck and illustrates why the drive in most modern armies is to increase the capacity of trunk links to 155Mbps through the use of asynchronous transfer mode (ATM) switching in the trunk network.

It is unlikely that the data rates available from combat net radio will significantly increase beyond current levels. Indeed, the current congestion of the HF and VHF spectrum could force a reduction in data rates.

Management of any large computer network is a demanding task, which becomes even more challenging when the computers are mobile and linked by a variety of communications means in a hostile physical and electromagnetic environment. Technically, command systems must be connected by a seamless network that allows staff officers to concentrate on their operational responsibilities rather than on the state of the network. Tactically, information flow must support the needs of the commander and staff, who should not have to understand the complete process by which information is made available. Battlefield command systems therefore require both technical management and tactical management.
Technical systems management includes:
- planning the network of communications and information systems;
- controlling and monitoring the interconnection of systems and devices;
- maintenance of network performance at the required standard;
- reconfiguring the network as required to accommodate the tactical situation or equipment failures; and
- equipment maintenance.

Tactical systems management includes:
- planning to ensure availability of information regardless of changes in the operational or tactical environment;
- planning database location(s) and replication(s); and
- controlling and monitoring information flow and database transactions.

Conclusions

This article has provided a brief introduction to battlefield command systems. For the sake of brevity, many important issues have not been able to be discussed. No mention has been made of sensor fusion, data ownership and administration, security, messaging formats, accurate position location and reporting, interoperability with other services and allies, or many other crucial issues. However, the article introduces battlefield command systems by providing an overview of the command and control cycle and the technologies and systems that support it. These technologies and systems are crucial to the modern commander's ability to move through the C2 Cycle faster than an adversary, particularly in the command and control of multiple simultaneous actions.

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The Alteration of Power Relationships – Entering the Decision Making Loop (A blind man’s vision of information warfare)

By Corporal Nicholas Shiels

In recent years the notion of Information Warfare (IW) has become a major area of discussion in discourse concerning military affairs. There have been many definitions of IW proposed to provide a framework for the definition of IW concepts and practices. The most widely accepted definitions of IW will be examined to determine how accurately they describe the concepts and practices of IW. This examination will focus on two aspects because of their relevance to military theory and practice: power; and the areas where military practice has a tangible effect.

IW has come to encompass a broad variety of existing practices and proposed practices within the military sphere. Existing practices; such as Psychological Operations (PSYOPS), Electronic Warfare (EW), and Command and Control Warfare (C2W), have become integral elements of joint military operations and, more importantly, strategic engagement. Proposed practices; such as Intelligence Based Warfare (IBW), Economic Information Warfare (EIW) and “Hacker” Warfare (HW) presents new possibilities for both military and strategic thinkers.

The quick rise to prominence of IW within military affairs reflects the recent paradigm shift in military thought, popularly labelled the Revolution in Military Affairs (RMA). The problem facing participants in military affairs in relation to IW, is twofold. First, much of the information concerning military affairs is considered to be highly sensitive by most nation states. Second, there is a strong element of guessing as to what future conflict will be like, and this confuses the current debate. These guesses cover the spectrum from technological advances in weapons and sensor systems, to the concept of Cyberwar (combat in the virtual realm). These guesses affect the ultimate direction of IW discourse and can be its most frustrating aspect. This has been identified in RMA literature as the major credibility problem facing the development of IW concepts.

Military discourse has shifted from its previous centre of gravity. This shift relates to the transformation of the framework surrounding notions of warfare, “from the industrial age to the information age”. Implicit within this shift is the increasing importance placed on information. This element is not new to warfare, as Martin Libicki and Daniel Magsig illustrate. The focus, until now, has been on information, information based processes, and information systems to enhance the application of military thought. The new element, introduced by RMA literature, has been the value placed on relevant information, in combination with application of IW outside of military affairs. With military discourse in a state of flux, military and strategic thinkers are presented with a new area of philosophical debate, hitherto unprecedented in military affairs.

Contemporary military discourse does not wholeheartedly throw itself behind the notion of an information age (or, even, a paradigm shift) especially given that the basic epistemology of military discourse is divided between two perspectives – industrial age and information age. The key point of RMA literature is that contemporary military discourse is based on concepts which are applicable to understandings focused on the industrial age. What becomes clear is that an alternative position, tending to gravitate toward an information age, exists – the “patterns of conflict argument”. The essence of this position is that military discourse is presently characterised by a conflict between an industrial age paradigm and an information age paradigm. However, it is clear from the literature on IW that an understanding of the relationship between these two paradigms enables the formulation of a clear notion of IW.

The basis of the RMA taxonomy – industrial versus information – is emergent from Keegan’s contemporary view of military history, in turn based on the didactic tradition. The operative basis of an information age perspective is a philosophy “accepting change and uncertainty as a positive influence in war”. Beyond this, current RMA literature is doubtful as to whether this is, in fact, an information age position at all. There are indications that such a position is merely an industrial age
perspective labelled as “information age” because RMA literature on IW is preoccupied with the amount of information that is available to decision makers. Despite this, alternative perspectives on IW emphasise the effective use of information, irrespective of its form and quantity. This acts as a counterpoint to the preoccupation in RMA literature, with the quantity of information available. Though it is written from the perspective of a paradigm shift, the RMA taxonomy is essentially an industrial age position as it addresses IW in terms of quantity and not quality. From an information age perspective, however, what is important are the relationships between information, information based processes and information systems; the key problem is to make sense of these relationships. This over-reliance on empirical methods (quantity as opposed to quality) has the potential to stifle the development of IW concepts.

The RMA is often referred to as the Military Technological Revolution (MTR). This description serves to confuse discussion further by replacing one acronym with another. The use of the term MTR illustrates the perceived dominance of technology in the realm of military affairs. IW has been described as a manifestation of the MTR due to its easily identifiable relationship with technological advance. The situation is further complicated by the fact that much of the technology required to conduct it is in a state of rapid and unpredictable change. Given these factors, reconciling notions of IW and current military discourse, as it has been framed, is problematic. It is difficult to reconcile an information age concept to an industrial age discourse. This presents several questions: Is there a truly resident notion of IW within military discourse? If it is; is this another potential conflict within the discourse of military thought? Or alternatively; is the notion of IW one of strategic policy rather than warfare, and as such is it more easily reconciled within discourse relating to geopolitical and economic interaction?

In answering these questions the very nature of what is common, and not, to both military and IW discourse presents itself. First, power is common to both discourses (the ability to impose the will of one onto another). In the case of current military discourse centres on the application of military force, regardless of form, to achieve an objective which either maintains or enhances an existing power relationship. Second, the debates differ in that one discourse (IW) is applicable in a broader range of circumstances (ie: political and economic spheres, as well as the military sphere) than the more recognisable technical problem of employing military force.

In order to situate discourse relating to IW, in terms of its application to various circumstances it must first be defined. The current state of RMA debate relating to IW has, unfortunately, failed to identify a comprehensive definition. This poses the additional question: Is a definition of the entire concept feasible or, is defining individual aspects of IW the only alternative at this point? Thus far the definitions of IW and IW concepts that have emerged seem to

<table>
<thead>
<tr>
<th>Source</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Emmet Paige</td>
<td>Actions taken to achieve information superiority in support of national military strategy by affecting adversary information and information systems, while leveraging and defending our information systems.</td>
</tr>
<tr>
<td>USAF</td>
<td>Any action to deny, exploit, corrupt, or destroy the enemies information and its functions; protecting ourselves against those actions; and exploiting our own information functions.</td>
</tr>
<tr>
<td>US Army</td>
<td>Actions taken to achieve information superiority by effecting (sic) adversary information, information based processes and information systems.</td>
</tr>
</tbody>
</table>

Table 1: Definitions of IW
follow *ad hoc* formulations taken from established literature on military conflict. The most well received definitions are US in origin (refer Table 1):

Daniel Magsig in his paper on IW examines these definitions and his conclusions centre upon notions of information superiority, definitions from the national perspective, and the primarily military focus of some definitions. There are obvious difficulties surrounding notions of information superiority and information dominance, specifically the problem of “battle space” awareness, because even defining the battlefield in IW is elusive. Magsig correctly concludes that the primarily military focus of some definitions of IW ignores the fact that IW can have both direct and tangible effects on both national and military strategy. However, the suggestion that the location of IW discourse is at the level of military strategy is unjustifiable, given the areas that IW can affect. For example elements of IW such as PSYOPS, EIW, and HW can target whole nations, as such IW affects areas outside of the bounds of military strategy. Notwithstanding this, these IW activities can have flow on effects in the specific area of military strategy. A good example is the crashing of elements of the North American telephone system and the Internet. For the US military, both incidents removed a medium of communication used to deal with day-to-day administrative matters. Alternative forms of communication had to be employed to cope with the temporary loss of these mediums, burdening the conventional military communications systems with increased signal traffic. This had the potential to slow down the ability of the US military to handle its information, information based processes and information systems. Further evidence to support the position that IW is more readily defined at the level of the nation state includes, the discussion in the US as to whether the Department of Defence (DoD) has security responsibilities for civilian information infrastructure.

The Australian Army definition of IW is:

> “Actions to achieve information superiority by affecting adversary IM while enhancing and protecting own IM.”

This definition of IW mirrors the US Army definition in most respects, presenting the same inherent problems with the notion of information superiority. The Australian definition differs, however, in that it centres on the term Information Management (IM). IM is defined as:

> “The management of information systems to ensure the effective and efficient handling of information to achieve corporate goals.”

The term “information systems” encompasses information and information based processes in addition to conventionally perceived information systems such as computer networks. The Australian definition reflects the relationship between the management of information, and information systems. Yet, in IW both of these areas can be affected either separately or in combination. The Australian definition fails to combine these two elements.

Rather than rely on an existing definition, a working definition will be adopted. This will allow the benefit of hindsight to extrapolate existing definitions. In addition, network structures rather than hierarchical structures will be used to provide a point of reference for the definition. Current definitions conform to the idea of varying levels of conflict, such as the strategic, operational and tactical. A network based definition conforms to the idea of power relationships both internally and externally in a network environment.

The definition that will be adopted reflects the broad scope of IW, going beyond what could in conventional terms be considered war. This is due to the serious problem presented by the word “warfare”. “Warfare”, when commonly used, refers to the range of outcomes that the use of force presents. In most people’s minds, the word “warfare” conjures images of bullets, bombs, body-bags, and CNN. An alternative exists to describe this type of activity, however – “engagement”, covers the spectrum from conflict to cooperation, and realises the concept of strategic cohesion. What is being defined here is Information Engagement, not Information Warfare. IE is not warfare per se but is a form of engagement between competitors for power. This is further reinforced by the use of notions of power and power relationships that are apparent in the Australian Army Information Management Manual.

Competitors in IE can be actors at all conventionally perceived levels of command. Nation states are not the only likely actors in this field; it includes individuals and organisational structures. In this sense, IE can be defined as:

> Activity that manipulates an adversary information asset in order to alter an existing power relationship between protagonists, whilst protecting friendly information assets from hostile activity.

It is implied that IE is resident at the level of national strategy. Thus, the placement of IE discourse within the context of military affairs is inappropriate, confusing the concept of IE with unclear and hard to reconcile notions of conflict at the global level. This approach does not deny that there is a warfare component, but expands these notions to relate IE to
other areas which are outside of the bounds of military discourse, such as IBW and EIW.

So far IE has been dealt with mainly in terms of the nation state but, as previously mentioned, there are other structures that can act in this capacity. In explaining this phenomenon, the working definition for IE that has been proposed will be examined. Rudyard Kiplings’s words will provide an appropriate analytical framework for this examination (Refer Table 2):

I keep six honest men
They taught me all I knew
Their names are What and Why
And When
And How and Where
and Who

Any individual can conduct IE activity in order to alter power relations. The determining factor in developing an IE capability is the relationship between theory and practice. Different structures such as nation states, terrorist groups, corporate bodies and individual “intruders” develop knowledge through differing means. This is due to the differences that exists in the practice of these varied enterprises. Alternative forms of practice will produce alternatives for the form of knowledge relating to a particular area. For example, the body of knowledge relating to IE that emerges from a conflict such as the Gulf War, is different to that which emerges from economic cooperation between nation states such as Australia and Vietnam.

Therefore, what is being identified by IE is the existence of different power networks that span the globe, cross all levels of command and interact across cultural, economic, military and political boundaries. These power networks usually align themselves to specific areas of activity such as the military. Emerging from this alignment is a number of global intra-networks based on power; represented by major corporate bodies, nation states, terrorist groups, issue motivated groups and organised criminal structures, all of which interact within the framework of the global political economy.

If it is assumed, that a period of transition is under way between an industrial age and an information age, the crux of IE activity concerns the identification of information assets relevant to a structure’s operational purpose. In an information age, the problem facing decision makers is not how much information they have, but what information is relevant. It is at this point that the “offensive” and the “defensive” elements of IE identified in RMA literature, and implicit in the proposed definition, can be examined.

In a sea of information, there are clear groupings of information critical to the conduct of a power structure’s activities. These groupings form part of what T. E. Lawrence described as “pillars of wisdom”; if these pillars fall, the structure collapses. IE activity directly targets these “pillars”. The question is posed, then, whether to adopt a defensive or offensive approach to IE? Or, alternatively, to adopt both approaches?

The impetus for defensive IE activity comes from IM policy as a discreet element. IM policy provides the driving force for developing an organisation’s information infrastructure and identifies potential threats posed to a structure’s information infrastructure, including the probable harm that is resident in particular threats. This enables an overall assessment of the acceptable level of risk to specific “pillars of wisdom” to be made, in combination with policy development, concerning the nature of an organisation’s information infrastructure. Defensive IE activity can then be prioritised addressing areas which require minimal risk and maximum development. Defensive IE activity in this instance is no different from its offensive counterpart, except that the focus of activity is directed internally rather than externally.

If defensive and offensive IE activity differ only in terms of focus, where should the initial focus lie when developing IE capability? The start point for the development of IE capabilities resides internally rather than externally. Before a structure can understand an adversary, it must understand itself. Those “pillars” present within a structure are the framework which allows the understanding of other organisations. IE activity directed internally allows for these “pillars” to be understood. At the same time this activity constantly reviews existing IM policy. In essence, this approach centres on the development of a body of knowledge relating to IE through the internal practice of IE activity.

In practical terms this implies the need for the formation of teams (similar to the IW “tiger” teams in the US) which conduct IE activity in order to identify critical areas of information infrastructure and test existing IM policy. The body of knowledge emergent from this activity also allows for the identification of potential threats to key areas of this infrastructure. The capability emerges to conduct IE activity in order to minimise the threats that are identified.

An example of where this type of activity would be of benefit in Australia, is the Sydney Olympic Games in the year 2000. Olympic events have been the target of issue motivated groups, individuals and terrorist groups over the last 25 years, including the
THE ALTERATION OF POWER RELATIONSHIPS – ENTERING THE DECISION MAKING LOOP

<table>
<thead>
<tr>
<th>Interrogative</th>
<th>Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>What</td>
<td>The proposed working definition of IE.</td>
</tr>
<tr>
<td>Why</td>
<td>In order to alter an existing power relationship.</td>
</tr>
<tr>
<td>When</td>
<td>At any time, through the spectrum of cooperation to conflict.</td>
</tr>
<tr>
<td>How</td>
<td>By the exploitation of information, information based processes and information systems.</td>
</tr>
<tr>
<td>Where</td>
<td>Determined by the nature of an existing power relationship. From a military perspective, the problem of defining the battlefield becomes a problem of identifying the nature of an existing power relationship.</td>
</tr>
<tr>
<td>Who</td>
<td>From the examples used in this discussion (Refer note 3), anyone can conduct IE activity. This may seem contradictory if actors are viewed from a hierarchical position, but not from a networked perspective, as seen by the existence of recognisable alternate discourses to that of the military interpretation of IE. The body of knowledge resident in the &quot;intrusion community&quot; is an example of a possible alternative. These alternate discourses are manifestations of other forms of practice and thus, are indicative of other potential actors capable of IE activity.</td>
</tr>
</tbody>
</table>

Table 2: Practicing IE

1972 Munich Games when the Black September Group killed members of the Israeli Olympic team and, more recently, the bomb blast at the 1996 Atlanta Games. These incidents indicate that security threats to the Olympics are credible and real. Parallel to this, there are numerous examples of recent incidents involving major information assets. Instances include the manipulation of the Commonwealth Bank's intra-network, the penetration of Scotland Yard's computer systems, the aforementioned US examples concerning the Internet and US telephone systems, the blackmail of major financial bodies in the UK and the penetration of the European Parliament's intra-network by US intelligence operatives. It would be unrealistic to assume that some issue motivated groups, individuals and terrorist groups, would not see IE activity conducted at the Olympics in Sydney as a plausible course of action.

This, and the relatively immature body of knowledge relating to IE activity, makes it wise in Australia's case to consider the development of IE capabilities. This would facilitate the development of a body of knowledge and practices relating to IE activity, allowing the proposed IE teams to act proactively, whilst still being capable of effectively dealing with unforeseen incidents reactively. The next concern is the division of responsibility for IE activity, and how to most effectively manage these divisions to facilitate the development of appropriate bodies of knowledge.

In Australia's case it is currently incorrect to propose the formation of IE teams at a national level, because of the ad hoc nature of the body of knowledge relating to IE. A more realistic proposition is that IE teams be formed on the basis of the information assets for which a structure already has responsibilities. Each team would develop distinctive practices that contribute to a broader body of knowledge relating to IE. The development of this knowledge would give rise to IE coordination at a national level. This, in turn, would allow for the conduct of IE activity by these teams irrespective of whether they are from law enforcement, defence,
Table 3: IE Methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human</td>
<td>Exploitation of personnel associated with an information asset in order to manipulate it.</td>
</tr>
<tr>
<td>Physical</td>
<td>Physically affecting an information asset in order to manipulate it.</td>
</tr>
<tr>
<td>Information</td>
<td>Exploitation of an information technology. Technology system in order to manipulate an information asset related to that system.</td>
</tr>
<tr>
<td>Electromagnetic</td>
<td>Exploitation of the electro-magnetic spectrum in order to manipulate an information asset that interacts with that spectrum.</td>
</tr>
<tr>
<td>Networked</td>
<td>Successive application of the above, exploiting the relationships between different elements of a power network. IE activity.</td>
</tr>
</tbody>
</table>

other government agencies, or a team combined from these areas.

There is one final aspect to be addressed concerning the concept of an information age. Seemingly implicit is the idea that in order to conduct IE activity a power network must be technologically advanced. Nothing could be further from the truth; IE has existed for a long time. Yet, it has only been with the emergence of new technologies that it has been recognised in its current form. The emergence of the information age has been necessary for the development of the concept of IE, but is not necessarily required for the conduct of IE activity. There are five general areas into which the techniques used to conduct IE activity can be categorised. These areas or methods can be described as means of manipulating an information asset (refer Table 3).16

The problem of clarity within discourse relating to IE centres on the variety of power networks that contribute to the debate. There are competing paradigms vying for dominance of IE discourse; military, corporate, intruder, criminal, cultural and political. Therefore, in explaining the notion of IW, what becomes clear is that IW is in fact IE. From the perspective of the nation state, IE discourse is resident at the level of national, not military, strategy. IE activity is most easily and accurately described in terms of power networks within the global political economy. If nation states wish to conduct IE activity,47 the development of such a capability is best conducted by developing network structures relevant to IE. Strategic planners need to consider the relationship between knowledge and practice emergent from such structures. They also need to be aware of alternative discourses or sources of knowledge relating to IE. Alternative positions have a bearing on either the body of knowledge or the practice of IE by that nation state. The concern of IE discourse in Australia is not so much whether IE activity should be conducted – it is already being conducted – but how this activity can be refined. Sun Tzu’s description of indirect tactics accurately sets the scene for further development of notions relating to IE and the development of structures capable of more developed forms of this activity:

Indirect tactics, efficiently applied, are inexhaustible as heaven and earth, unending as the flow of rivers and streams; Like the sun and the moon, they end but to begin anew; Like the four seasons, they pass away to return once more.

NOTES

THE ALTERATION OF POWER RELATIONSHIPS – ENTERING THE DECISION MAKING LOOP

22. Power Relationship (Defn): The relative difference of one actor in specific circumstances, in terms of an ability to impose their will on another actor in that same situation.
32. "Engagement", here, is used in the sense of discourse relating to the global political economy, not a honeymoon in the Bahamas.
34. Australian Army, Op Cit, pp. 6 - 12.
35. The word "manipulate" is used to describe the range of circumstances that include: access, manipulation, and destruction.
36. The term "information asset" is used to combine the two aspects of information management and information systems as previously defined in the Australian Army Information Management Manual.
37. The word "alter" is used to describe the range of circumstances that include alteration, maintenance, or activity supporting the alteration or maintenance of an objective.
38. It would be a sad day for English Literature if Rudyard Kipling required a detailed citation, but for those so inclined this particular snippet of Kiplings work was found in: Keen, M., Marketing and Librarianship, Australian Library Journal, May 1990, pp. 124.
40. The "intrusion community" is what the media would label "hackers".
41. Refer footnote 36.
42. Magsig, Op Cit, pp. 2 - 5.
44. Magsig, D., Op Cit, pp. 2 - 10. As has been previously mentioned these incidents are sourced to The Australian, C41 - Pro mailing list and conventional news reporting and have been graded accordingly.
45. As has been previously mentioned these incidents are sourced to The Australian, C41 - Pro mailing list and conventional news reporting and have been graded accordingly.
46. Magsig, Op Cit, pp. 5 ff, see also Hoffman, L., Op Cit, pp. 2, ff.
47. It is assumed by the sheer volume of discussion concerning IW, the majority of which is sponsored by nation states, that they do.
BIBLIOGRAPHY


Lawrence, T., The Seven Pillars Of Wisdom, London.


United States Marine Corps (USMC), Warfighting, FMFM1, 1989.


Corporal Shiels began his military service as a Midshipman RAN at the Australian Defence Force Academy in 1987. He resigned towards the end of that year at his own request and returned to tertiary studies at Adelaide University before re-enlisting in the Army in 1991. He served initially with the infantry with 3RAR as a paratrooper before completing Intelligence Corps training. He also served with 1 Commando Company: Australian Intelligence Security Section Townsville and for a short period at Army Office. After leaving the Army he returned to tertiary studies at Flinders University and completed his Bachelor of Arts Degree in December 1996. He maintained his links with the Army through the Army Reserve where he was a member of 6 Brigade in the Ready Reserve and then 9 Brigade in the normal Reserve. This article by Corporal Shiels was submitted by his parents after his death on 31 December 1996.
The Application of False Principles and the Misapplication of Valid Principles: A Trap for the Unwary

By A.C.G. Welburn, Department of Defence

"Wars must differ in character according to the circumstances from which they proceed."

Clausewitz

"... any situation must be totally understood and rigorously analysed before action is taken."

Mao Tse-tung

Introduction

Military history has been used and abused by academics and military professionals alike in their endeavours to either explain, support, promote or refute military events, developments and theories. Although the usefulness of military history has been questioned on numerous occasions, there are always lessons from the past that are applicable to the continual development of military theory. However, care must be taken to ensure that the mistakes of the past are not simply repeated. Indeed Armies are often accused of preparing for the last war instead of the next.

The principles and lessons of the past must be examined for their relevance and discarded if found unsuitable. The events that make up military history must be studied in width, depth and most importantly context if their relevance is to be understood. While the French passive defence doctrine of couverture, epitomised by the Maginot Line, was at odds with the concept of elastic defence pioneered by the Germans, was it wrong for the circumstances at the time?

Military art is dynamic - it does not take place in a vacuum and is affected by political, technological, social and economic change. The challenge is in using the past "to come to grips with the present"; to examine concepts and their material application, to understand what has happened, why and how it happened and then to determine what is relevant today.

In the absence of conflict, history must provide answers for the present and the future. The difficulty arises when the answers and their derived principles are either applied incorrectly or are proved wrong in some future conflict.

This article will discuss the statement that "There is nothing more harmful to original military thought than a successful campaign which may establish false principles." Two cases will be used to support this statement: the "foco" guerrilla theory of Ernesto "Che" Guevara and Regis Debray, and Israel Tal's all armour doctrine for the Israel Army. A number of examples will then be used to show that the misapplication of valid principles is at least equally as harmful, if not more so, to original military thought, as the adoption of false principles.

Theories of Guerrilla Warfare

In orthodox Marxist revolutionary theory the proletariat is the key to any communist revolution. Mao Tse-tung rejected this creed as unsuitable for China and instead emphasised the role of the peasants in an agrarian based revolution. Mao's theories grew from a great deal of introspection based on practical experience, which stressed the realistic application of theory.

Mao's contributions to revolutionary theory are many and include the concepts of protracted war, the phases of guerrilla war and the role of the people. But above all Mao stressed the dominant role of politics and political organisation. While "Political power grows out of the barrel of a gun; the Party commands the gun; the gun shall never be allowed to command the Party." The first requirement for a successful guerrilla campaign was therefore the establishment of a national political infrastructure designed to nurture the embryonic guerrilla force. The centre of the revolution was the Party, while the guerrilla force was the vanguard of the Party. Mao warned against deviation from this principle when he wrote:

"Some Comrades in our Party still do not know how to appraise the situation correctly ... They seem to think that ... it will be labour lost to attempt to establish political power by hard work. Instead, they want to extend our political influence through the easier method of roving guerrilla action ..."
The communist-led forces in Vietnam proved the efficacy of Mao’s principles of guerrilla warfare during their 30 year struggle for independence. While Mao’s theories were modified by Truong Chinh and Vo Nguyen Giap to reflect the different situation in Vietnam, there was no deviation from the need to establish parallel political and military structures with the political functions being dominant. The strength of the Vietnamese communist resistance came from its political infrastructure, the National Front for the Liberation of South Vietnam (NFL). Despite major reverses in 1956, 1957, 1965 and at Tet 1968, the NFL continued to function and give direction to the political and military struggle. It was attacks on their political infrastructure which concerned the Vietnamese communists: such attacks directly challenged the hold of the Party over the people.

But while the Vietnamese communists vindicated Mao’s principles of political mobilisation and organisation, another revolutionary war on the other side of the world was to challenge them. While the Chinese and Vietnamese revolutions were protracted affairs, the Cuban revolutionary war lasted just over two years. Castro’s lodgement in the Sierra Maestra mountains and his consequent low key guerrilla campaign were the catalysts needed to topple Batista. The latter’s regime was “corrupt, unpopular and inefficient ...”, and had lost the support of the rich upper and middle classes, the military and the Church. It was “not so much that the guerrillas were all powerful but a combination of factors that worked in Castro’s favour.”

However in analysing the Cuban Revolution Guevara and Debray overlooked many of these factors in the formulation of their “foco” theory. Both concentrated on the role of the small military cadre and forgot the support provided by the remainder of Cuban society. Both emphasised the role of the countryside and underplayed the role of the cities which had provided logistic support and manpower. The cities supported the student movements, the workers’ strikes and the military mutinies that weakened Batista’s hold on Cuba, and paved the way for Castro’s success.

Guevara wrote that “Given suitable operating terrain, land hunger, enemy injustices etc, a hard core of 30 to 50 men is, in my opinion, enough to initiate armed revolution in any Latin American country.” Furthermore “One does not necessarily have to wait for a revolutionary situation to arrive; it can be created.” He then went on to develop the “foco” theory of guerrilla war, where “foco” referred to both the principle and the actual group of revolutionaries themselves. Guevara was drawing general principles from unique circumstances and giving them universal application without a thorough examination of all the events and their implications. For Guevara, the guerrillas “were a revolutionary fusion of political and military authority” whose military actions provided a “foco” or focus for the revolution. The foco was “the vanguard of an armed struggle of the urban and peasant masses against the repressive methods of a government which is illegitimate and unpopular.” While Mao held that the Party was the centre of the revolution, Guevara believed that the “foco” was the “political and military centre ...” Political organisation would simply follow military success.

However, the “foco” principle of guerrilla warfare failed in Columbia (1961), Guatemala and Ecuador (1962), Peru (1963) and Bolivia (1966-1967), the latter experiment costing Guevara his life. Guevara believed Bolivia was ideally suited as the starting point for a revolution that would sweep Latin America, and he ignored any signs that indicated otherwise. But Bolivia in 1966 was not Cuba of 1957 and the foco principle was unsound. Having stated that “the social composition of the “foco” should closely reflect that of the population of the area in which it operates.” Guevara’s “foco” comprised Cubans and Peruvians, none of whom could speak the local language. The “foco” was unable to establish a common cause between itself and the peasants, it alienated the Bolivian Communist Party and Guevara rejected assistance from the cities as it would have cost him leadership of the “foco”. Consequently the “foco” was never able to popularise its cause. Furthermore, the Bolivian Army was much more capable than the Cuban Army and, with American training, was able to track down and eliminate Guevara’s “foco”.

In formulating their theory, Guevara and Debray ignored the specific and unique circumstances that had existed in Cuba and instead developed universal principles for Latin American based revolutions. They ignored facts which contradicted their theory and made ends fit means. The resultant failure of the “foco” principle of revolution in Latin America supports the first hypothesis of this article, that a successful campaign (the Cuban Revolution) established a false principle (the “foco” theory) which failed when it was applied universally.
The Principles of Mobile War

The second study to illustrate the danger caused by successful campaigns establishing false principles comes from the opposite end of the spectrum to guerrilla war and discusses the development of the principles of mobile warfare in the Israeli Defence Force (IDF).

The embryonic IDF had relied on mechanised and motorised forces during the Israeli War of Independence, because they had too few tanks, which were unreliable, defective and obsolescent. From these experiences three schools of thought emerged: the first saw armoured vehicles simply supporting mechanised infantry forces. The second school advocated the use of all armoured units while the third endorsed the all arms concept of mechanised infantry, tanks and artillery operating as a combat team. The first school, the mechanised infantry lobby, carried the day and it was to this force that Israel looked for success in the 1956 Sinai Campaign.

However, contrary to expectations, it was the tanks of the Israeli 7th Armoured Brigade which broke the back of the Egyptian border defences. As a result of this success, the development of armour outstripped that of infantry and the “armoured corps became the decisive branch of the land forces ... capable of breaking through solid defence lines, of outflanking, surrounding and crushing the enemy armour.” Instrumental in pushing the all armoured concept was Israel Tal, the commander of the Israeli armoured corps. Tal believed that “massed formations of battle tanks moving across the open spaces of the Sinai desert needed no mechanised infantry to protect them.” The answer to Israel’s defence problems was battlefield mobility which meant tank warfare. Consequently little money was spent on other combat and combat support arms and the services, as “heavy armour, provided it had movement” that epitomised the all arms battle concept pioneered by Guderian and Tukhachevsky.

Finally Yoffre, with a division of two armoured brigades, infiltrated his force between the Egyptian positions thereby outflanking them using an indirect approach, as advocated by Liddell Hart.

In the aftermath of the war, Tal’s theories of armoured warfare again dominated discussion. The success of Sharon’s all arms approach at Abu Agheila was ignored as were Tal’s problems at Rafah and Jiradi. Tank units were stripped of their organic fire support and mechanised infantry and by 1973 “most infantry battalions had been converted to armour; as distinct from at least 17 brigades equivalents of armour, there were reportedly only three paratroop and a few first line infantry brigades ...” What mechanised infantry and fire support units remained were relegated to secondary functions. These changes were also carried over into the Israeli Reserve formations. Consequently Tal’s principles of all tank warfare permeated Israeli army development, and resources were spent in developing military theories and doctrine to support the overall concept.

That these principles were based on false logic was demonstrated during the 1973 Yom Kippur War. The Israeli concept of defence for the Bar Lev Line relied on mobile armoured units held in depth to counter any Egyptian attack across the canal, supported by fighter ground attack aircraft. However, the Egyptians had learned from their mistakes in 1967 and, through the use of a comprehensive air defence system, nullified the Israeli “flying artillery”. Safe from harassment, Egyptian anti-tank missile teams were then able to defeat the all armoured units of the Israeli Army in detail. It was Jiradi all over again but with much more serious consequences. By nightfall on 6 October 1973 the three armoured brigades responsible for the defence of the Bar Lev Line had lost two-thirds of their tanks in unsupported attacks on the Egyptian bridgehead and had been fought to a standstill. Israeli counter-attacks on 8 October were “subjected to intense artillery fire, while they themselves had very little artillery support or accompanying infantry” with which to overcome the anti-tank missile teams and for counter-battery fire.

The Israelis were eventually able to breach the Egyptian bridgehead and cross the canal using a combined all arms force. Infantry, engineers and artillery held a corridor through the Egyptian defences and across the canal, allowing an armour heavy Israeli counter-attack to take place along the west bank of the canal.

After the war the IDF admitted it “had somewhat overstressed the role of tanks and underemphasised the role of other mechanised units ... The trend ...
after the war has been to view all ground forces as one combined integrated force." Yet the lessons had been there for those prepared to analyse the facts. Despite Tal's "success" at Rafah, Sharon, using a different approach had achieved as equally good if not better results when he "cracked" the much stronger Abu Aghaia defences in 1967. However Tal, as commander of the armoured corps, was in a much better position to promote his own theories and then oversee their introduction into service. A successful campaign (the 1967 Six Day War) had established a false principle (the all tank army) which had dire consequences for Israel and the IDF in 1973. Israeli military doctrine based on this false principle then allowed the IDF to become severely imbalanced. It took a major reversal at the hands of the Egyptians to show the Israelis the error of their ways.

These two examples illustrate how original military thought can be proved wrong through the use of a successful campaign to establish false principles. Guevara's foco theory might have been applicable to Cuba but it could not stand the test of application in other Latin American countries. Similarly Tal drew the wrong lessons from the 1967 Six Day War and again the principles he enunciated failed the test of combat in 1973. With hindsight it is easy to see where such military thought went wrong: the principles espoused by Guevara on the one hand and Tal on the other were flawed from the outset as they did not take into account all the circumstances of the time.

False principles are usually discovered when they fail in application. Consequently the impact they have on the development of military theory and doctrine can be limited and remedied quite quickly. In the case of the foco theory, Guevara should have realised something was amiss with the early Latin American failures - the evidence was already available before he attempted his Bolivian revolution. In Israel the fallacy of the all armour concept was exposed in the first days of the Yom Kippur War. Remedial action was taken immediately to rectify the imbalance of Israel's armoured forces and long term measures were introduced after the war.

However, what is more damaging to original military thought and the ongoing development of military doctrine is the misapplication of valid principles to suit either Service requirements or preconceived ideas. Such action discourages conceptual thinking as old solutions are simply applied to new situations as will be demonstrated next.

### The Misapplication of Firepower

Western military strategy is dominated by American ideas, concepts and weapons technology due to the role America's armed forces play in defence of the West. American military strategy draws on American experiences stretching back to the American Civil War where "victory was to go ... to ... the proper investments would produce the desired results." The war in Vietnam, under the guidance of Defence Secretary Robert McNamara, was run on a business basis as "... the proper investments would produce the desired results." The proper investment was conventional forces, Westmoreland's strategy of attrition, and massed firepower. For Westmoreland the enemy "had to be pounded with artillery and bombs ..." regardless of whether such a strategy was successful or not. In the same way, the Army of the Republic of Vietnam, (ARVN), was raised as a conventional military force equipped with tanks, heavy artillery and helicopter gunships - a mirror image of the American Army. But its enemy, the NLF and the Viet Cong (VC) were fighting a guerrilla war which should have been countered by a non-conventional, counter-insurgency trained and equipped force.

But the principle of firepower so dominated American military thought that any theories which failed to incorporate its use were dismissed as lacking credibility.
The Misuse of Air Power

By the end of the Second World War, many of the leading defence strategists believed air power was invincible. Air power proponents were “convinced of the decisiveness of strategic bombing on the war’s outcome ... Thoughts of limited conflict and tactical air power were swept aside ...” The answer to any conflict was strategic bombing on a massive scale with the final threat being the nuclear option.

But the doubts that had existed over the efficacy of the Second World War bombing campaigns were to be raised in both Korea and Vietnam. Air campaigns are costly in equipment, manpower and expended ordnance. Experience in the Korean interdiction campaigns and during Operation Rolling Thunder in Vietnam showed that the cost of such operations far outweighed the resulting benefits. Yet despite the obvious lack of success in conducting politically restricted bombing campaigns, the air power strategists continued to carry the day. Korea had shown that “Operating by themselves without pressure being applied on the enemy by cooperating ground forces, aircraft could harass the enemy and delay the movement of supplies, but could not carry the day by themselves.” Yet this lesson had to be relearned in Vietnam where the NFL and VC again held the initiative and could match their activity rate to the rate at which supplies managed to reach them.

Air power, to be effective, must be supported by good intelligence and the selection of suitable targets. Bombing the jungle just because the air asset is available does not meet either of these criteria. In September-October 1967 the Americans fought the ground-air battle of Con Thien near the Demilitarised Zone where “off and on for 49 days SLAM [Seek, Locate, Annihilate and Monitor] strikes pummelled the enemy ... and demonstrated that massed firepower was in itself sufficient to force a besieging enemy to desist.” Not to be defeated but made to desist! A similar strategy was adopted at Khe Sanh in Operation NIAGARA II, with an identical aim in mind. Indeed, Higham points out that most of the B-52 raids carried out in Vietnam were spoiling attacks in which large tonnages were dropped over suspected areas of enemy concentration.

This is not to say that there was not a role for air power in both Korea and Vietnam, rather that the preconceived notions of employment needed revising to suit each war. It was a case of the asset being available and, because it was available and because doctrine said it was to be used in a certain way, then that was the way it was to be employed. Such an approach does not encourage military thinkers to produce strategies and doctrine applicable to new circumstances. Original military thought simply stagnates.

The successful use of air power by the French at Thai Binh (28 May-8 June 1951) in defeating attacks by Giap’s Viet Minh forces led to the development of the theory of fortified airheads or harrison. Disregarding such factors as Thai Binh’s distance from Hanoi, the turn around and loiter time for aircraft and the duration of the battle, the French sought to repeat the “meat grinder” effect of Thai Binh elsewhere. The battle of Hoa Binh (14 November 1951-22 February 1952), followed by the air supported siege of Na San (October 1952-August 1953) confirmed for the French their principle of air supported bastions able to withstand concerted Viet Minh attacks. Evidence which ran contrary to this notion was ignored.

Hence the decision to garrison Dien Bien Phu and support it logistically and offensively by air. The fall of Dien Bien Phu was one of the worst French military failures of the post-1945 period and resulted, in part, from the misapplication and preconceived ideas of what air power could achieve.

The British faced a similar problem in Malaya where “aircraft ... took part in the campaign because they were there.” Despite the fact that airstrikes against suspected guerrilla targets were found to be counterproductive, they continued throughout the war. Because of the difficulty in locating and attacking guerrilla camps from the air, “Air attacks were therefore made on specified areas of jungle, about 1000 yards square, and on line targets stretching across as much as 6 000 yards of jungle ...” This was clearly a wasteful application of air power but the practice continued. Attempts were made to switch to precision target bombing but these inevitably ended up as harassment operations. As General Clutterbuck commented after the war, “... offensive air strikes were almost wholly unsuccessful in Malaya, they probably did more harm than good.” Air power, in its non-offensive role certainly had a function to perform in Malaya, but offensively it was used simply because it was available.

The same happened in Kenya between 1952 and 1955 where an air campaign of attrition was conducted against the Mau Mau. By late 1954 the “… RAF were given a free hand to bomb suspected terrorist hideouts in the forest with the squadron of Lancasters brought in for the purpose...” However,
by that stage the anti-Mau Mau campaign was well under control using conventional counter-insurgency techniques pioneered by the British in Malaya. There was no need to introduce heavy bombers — there was no justified use for them. A squadron of helicopters would have been more effective.

And the lessons are still not learned. In 1982 the RAF launched seven Black Buck Vulcan bomber sorties against the Argentinian forces on the Falkland Islands. It took some 16 Victor tanker and Vulcan bomber aircraft and up to 17 separate fuel transfers for just one Vulcan bomber to reach the Falklands. Yet Operation Black Buck was “no more than the opening of the preliminary phase” of the war. Middlebrook views the Air Force involvement as “an anxiety to help, in circumstances which had all but excluded that service from the war.” The operation was “just a little bit of a show, a little flurry at the end of the V Force’s life.” It was a little flurry that was very expensive and which achieved very little: only one of 55 x1000 pound bombs actually hit the runway.

Although Harrier aircraft are not suited to “loft bombing” and 1000 pound bombs are not as effective when delivered at low level, when combined with naval gunfire support, the British forces in the Falklands were capable of denying the Argentinian Air Force use of Stanley airfield for jet fighter aircraft. Still the decision was taken to use the British strategic bomber force — it was there, it was available and, in the words of one of the pilots “It was absolutely marvellous to be part of that.” The effort expended in mounting the Black Buck operations was out of all proportion to the amount of damage explicitly and implicitly caused.

**The Abuse of Special Forces**

An analogy can be drawn between the use of air power simply because it is available and the use of special or elite forces. Such forces have a long history but their use became prominent during the Second World War as a means of striking at Nazi Germany. Conventional means of warfare were unavailable so unconventional means were used. However there are numerous examples where special forces have been misemployed. Such forces were “almost always lightly equipped and more often are employed in prolonged fighting alongside and against standard units who had heavy weapons and better support facilities.” Such forces should be used for the tasks for which they are trained and then replaced by conventional forces as soon as possible.

Israeli paratroopers were successful in holding the Mitla Pass for two days during the Sinai Campaign but were used unsuccessfully as ad hoc infantry in both 1956 and 1967. French paratroopers achieved success in lightning raids on Viet Minh logistic bases in the highlands of Tonkin and in similar raids in support of French operations. However they were beaten by Giap when confronted in a conventional defensive position at Dien Bien Phu. They were used simply because they were available and because much was expected of them.

U.S. Marines were used in the Northern Provinces of South Vietnam and at Khe Sanh so that all American forces could be involved in the war. This was despite the fact that long term positional defence is the domain of infantry, not marines nor paratroopers who are trained for specialised tasks. It is a waste of their talents and capabilities. Their unsuitability for such a role was highlighted by General Rosson, the Commander of Provisional Corps, Vietnam, who said after visiting Khe Sanh that the marines were “not sufficiently prepared … for the kind of war … that has evolved along the DMZ.”

The tendency to use such forces simply because they are available is common practice. In Korea in September 1950 a parachute assault was conducted north of Pyong-yang in order to cut off retreating North Korean troops. The operation disrupted both offensive and logistic air support operations throughout South Korea and was unwarranted. One U.S. General went so far to say that “The drop was not worth the effort … it was unnecessary.” It could have been carried out as a combined armour-infantry operation so quick was the rate of advance.

Again, in trying to find a raison d’être for such forces the Americans even conducted an airborne operation as part of Operation Junction City in Vietnam in 1967. This parachute assault had “… the modest aim of supplementing the force that could be lifted by helicopter.” There was no operational necessity to use such troops, again it was just a case of them being there, of being available and of Service pressure being applied to have them used.

The British are also guilty of abusing the use of special forces. While the Falkland’s Campaign was successful, the ground war was fought primarily by Royal Marine Commando and Paratroop units. The former are trained for amphibious assault operations and raids from the sea, while the latter are trained in airdrop operations. They are not “straight” infantry per se. The Marine role was over once the landings at San Carlos had been successfully reinforced. The
march to Stanley, the battles of Goose Green, Tumbledown and Longdon should have been fought by regular infantry, not commandoes and paratroopers. Their successful use in the Falklands will need to be fully analysed to ensure that no false principles are deduced.

Mistakes in Counter-Insurgency Operations

The final case study to be examined in support of the hypothesis that the misapplication of principles is just as damaging to original military thought as the establishment of false principles centres on the “New Village” concept of the Malayan emergency. The failure of this concept in Vietnam does not invalidate the concept, rather the circumstances surrounding the Malayan experiment were not fully understood and the concept was misapplied in the “Agrovilles” and “Strategic Hamlet” programmes.

The key to the “New Village” concept was the Briggs’ Plan which aimed at incorporating the Chinese squatter population of Malaya (some 38 per cent of the population), into the mainstream of Malayan community life. It was Briggs’ intention “…to eliminate the Communist cells amongst the Chinese population to whom we must give security and whom we must win over …removing the bandits’ sources of supply and information…” Briggs was determined to make the Chinese believe that Malaya and not “Red China” was their home and he aimed to achieve this by assimilating them into the community politically, economically and culturally.

The “New Village” concept was only part of Briggs’ Plan. While the New Villages would separate the Chinese squatters from the guerrillas, other elements of the Plan would formalise the counter-insurgency management system, strengthen the British-Malayan intelligence network and see the establishment of false principles centres on the “New Village” concept of the Malayan emergency. The failure of this concept in Vietnam does not invalidate the concept, rather the circumstances surrounding the Malayan experiment were not fully understood and the concept was misapplied in the “Agrovilles” and “Strategic Hamlet” programmes.

The success of the Malayan New Village and associated counter-insurgency concepts did not go unnoticed in Vietnam. In 1959 Diem introduced the Vietnamese equivalent of the New Villages – Agrovilles. But as Harrow records, in Vietnam “the peasants assigned to the Agrovilles had been uprooted from their native villages and ancestral graves, and their traditional social patterns disrupted”. The Vietnamese peasants had much stronger emotional and cultural ties to their land than the Chinese Malayan squatters. Instead of welcoming the move to new settlements, the Agrovilles became a hated symbol of Diem’s regime. Indeed the Agroville programme, which lasted only two years, was designed merely to control the population, not deal with any underlying rural, economic or social problems.

The Agroville programme was replaced by the Strategic Hamlet concept which repeated the same mistakes. There was no overall direction to the programme and military operations failed to support the development of the Hamlets so that when the military withdrew the communist guerrilla simply returned. There were no attempts made to introduce responsible civil administration, and “…no real effort was made to separate the population in the strategic hamlets from the Viet Cong by eliminating their agents and supporters …or by imposing control on the movement of people and supplies.” It took the British three years to establish approximately 500 New Villages in Malaya; it took only two years for the South Vietnamese and Americans to build 8,000 strategic hamlets. However as Thompson states, “the strategic hamlet programme had now gone too fast, with a consequent dispersal of effort and a scattering of hamlets over too wide an area.” The
administration of the hamlets was riddled by corruption and the local provincial forces were unable to provide sufficient protection. Consequently the hamlets were gradually destroyed, either by the Viet Cong or by their occupants or by both. It was not that the principle of relocation was wrong but the way it was implemented.

Another proven principle from the British Malayan experience was the primacy of the civil authority. When Thompson derived his five principles of counter-insurgency warfare from the Malayan Campaign, all five principles highlighted the role of the civil government. A Director of Operations coordinated military and civil police actions but the Director, excluding Templar who combined the senior military and civilian positions in Malaya for a short period, was responsible to the civilian authorities.

The Americans, on the other hand, ignored the unity of command. Indeed Westmoreland reported that he “consistently resisted suggestions that a single combined command could more efficiently prosecute the war”. Instead the administration of the war was fragmented. US forces were responsible for prosecuting the war against the communist-led forces as “superior ... firepower would be most advantageously employed against the [enemy’s] big units; ...”. Komer and the South Vietnamese Joint Chiefs of Staff were responsible for Pacification; General Abrams, Westmoreland’s deputy was responsible for the Vietnamisation programme while officials in Washington were responsible for any negotiations with the enemy. Consequently the war was conducted on a number of autonomous fronts with little coordination between them. Westmoreland’s primary concern was in seeking a military victory which would then enable the ARVN to deal with the guerrilla infrastructure unhindered. This approach tended to negate any simultaneous US-ARVN action across the spectrum of responses available to Westmoreland. There were no political objectives to which US military strategy could be aligned. Yet Thompson’s very first principle had been that the government must have a clear political aim.

It was not that the principles deduced by Thompson were false; most of them have stood the test of time. Nor should these principles have been adopted without modification. Malaya and Vietnam were two different cases of guerrilla insurgency. The lessons of Malaya could have been modified to suit the Vietnamese conditions if the time had been taken to compare and contrast the two situations. Instead those in authority deduced that there was little of value to be gained from this British experience and they closed their minds, just as Tal had done in Israel, to any suggestions that ran counter to their own. For Westmoreland the war was a war of attrition in which firepower was the major player. There was no room for original military thought which ran counter to preconceived strategies, tactics and doctrine.

**Conclusions**

The profession of arms must constantly modify strategy, tactics and doctrine to keep pace with changing world circumstances and new weapons’ technology. One of the ways in which the nature of the change can be monitored and assessed is through the examination of military campaigns to identify relevant principles and lessons. Such campaigns should be analysed in order to determine what happened, what had been planned to happen and what should have happened.

Some principles are enduring. These are usually conceptual and include amongst others flexibility, cooperation, coordination and economy of effort in the handling of military force. Other principles can be applied to tactics and comprise, in the case of the defence the need for depth, mutual support, all round defence and the maintenance of a reserve. Principles also cover the attack and the conduct of logistic support, but again such principles are enduring, it is just their application that changes.

One challenge to the development of military thought lies in the application of such principles. An equally important challenge lies in the development and application of principles affecting military strategy and force or weapon employment. Mistakes in both these areas cost lives and waste finite resources.

Guevara’s belief in his “foco” theory cost him his life and the lives of the members of his foco. Guevara and Debray’s mistakes were to try to find universal principles of guerrilla warfare in the specific and unique set of circumstances surrounding the Cuban Revolution. Guevara, familiar with the Maoist theory of revolutionary warfare, rejected the need to establish a political infrastructure and wage a protracted struggle. Instead the foco was the answer and the method by which revolutionary war would quickly sweep Latin America.

Similarly, Israel’s adoption of the “all tank” concept proved fatal during the first week of the Yom Kippur War. Ignoring evidence to the contrary, proponents of the concept selectively analysed the
campaigns of 1956 and 1967 in order to convert the Israeli Army from a combined arms to an all tank force. A successful campaign was used to establish false principles which were then converted into strategic, tactical and practical doctrine. The development of military theory relies on consideration of all the available evidence, not just aspects which support the desired end result. For Israel the false principles of manoeuvre warfare adopted between 1967 and 1973 could have had monumental consequences for the future of the country.

However while false principles can be quickly discarded once they have proven fallacious, the misapplication of well founded principles governing the strategic and tactical employment of resources can unduly influence the development of military doctrine. There are always circumstances where proven techniques and courses of action are unsuitable and not applicable. The British counter-insurgency programme developed during the Malayan Emergency was a total package which relied on each element to reinforce the whole. The New Village concept would not have been as effective without the other measures that the British introduced. Transposing only parts of this concept to Vietnam, and not fully appreciating the differences between circumstances in both countries resulted in the failure of the Agrovilles and Strategic Hamlet initiatives. The British principles of counter-insurgency warfare were not false, rather they were incorrectly applied.

Another area in which military thought and concepts go astray is in finding use for a resource or asset simply because it is available. The use of offensive air power and firepower dominate the American concept of war. Provided intelligence is accurate and suitable targets exist and can be identified, then the use of offensive air and firepower is always an option to be considered. However perseverance with a strategy just because the asset is available, as in Korea and Vietnam, only add to the negative aspects of military knowledge. Similarly the use of marines or paratroopers in static garrison roles (Khe Sanh and Dien Bien Phu) or as mechanised infantry (Israeli Six Day War) is an abuse of their capability, and can lead to the deduction of invalid conclusions. If there is a continuing role for such assets, then time should be spent in deciding what that role is and how it should be performed, instead of simply misemploying such resources.

There is no doubt that successful campaigns, which on analysis produce false principles, are harmful to the development of military thought, strategy, tactics and doctrine. Yet this is only one aspect of the problem. Equally as harmful is the continual misapplication of correct principles and efforts made to justify their continued abuse. Original military thought should be encouraged to produce new strategies, tactics and doctrine to meet changing world circumstances. It should not be "strait-jacketed" by preconceived ideas and inter-service competition.

Notes

5. Ibid., pp. 215-217.
7. Van Creveld, *op cit.*, p. 564. By way of example the exploits of Ghengis Khan and his Tartar Mongol horde were used by Bellamy to show how mobility, fire power and shock action link the Mongol Tuman and the Soviet Operational Manoeuvre Group. Those same exploits were used by Pittard...


10. Ellis, op cit., p. 168.


13. Trioung Chinh, Primer for Revolt: The Communist Takeover in Vietnam, New York: Frederick A. Praeger, 1963 and Vo Nguyen Giap, People's War, People's Army: The Viet Cong Insurrection Manual for Underdeveloped Countries, New York: Frederick A. Praeger, 1982. Trioung Chinh and Giap modified Mao's stages of Guerrilla War and incorporated the Vietnamese concepts of opportune moment, general uprising and general offensive, massive blow and the role of sanctuaries. They also proved that the three stages of war are not finite and indivisible but can be melded one into the other and carried out simultaneously.


15. ibid., pp. 601-602.


18. Ellis, op cit., p. 186.


20. ibid., p. 111.


22. Moreno, op cit., p. 118.

23. ibid., p. 119.

24. Debray took this heterodoxy one stage further when he wrote: "In Cuba it was not the party that was the directive nucleus of the popular army... the Rebel Army was the leading nucleus of the party, the nucleus that created it... Under certain conditions, the political and the military are not separate, but from one organic whole, consisting of the people's army, whose nucleus is the guerrilla army. The vanguard party can exist in the form of the guerrilla foco itself. The guerrilla foco is the party in embryo." Regis Debray, "Revolution in the Revolution? William J. Pomeroy (ed), Guerrilla Warfare and Marxism: A Collection of Writings from Karl Marx to the present on armed struggle for liberation and for Socialism, New York: International Publishers, 1968, p.303.

25. Moreno, op cit., p. 117.


32. Luttwak, op cit., p. 289.

33. ibid., p. 290.

34. Tal had been able to break into the Rafah complex in his advance towards Jarid but had been unable to clear the Egyptian infantry from their defensive positions. Consequently each successive wave of tanks had to refight its way through the Egyptian defences until mechanised infantry were used to clear the ground. Ibid., p. 240.

35. Ibid., p. 570.


39. Ibid., p. 263.


42. Howard, op cit., p.105.


44. Ibid., p. 5.

45. Karnow, op cit., p. 249.


50. Westmoreland, op cit., p. 204.


52. Indeed air power was instrumental in defeating the communist-led forces during their 1972 Easter offensive while the absence of American air support in 1975 led to the quick demise of the ARVN in face of the People's Army of Vietnam's (PAVN) 'Great Spring Offensive'.


54. Ibid., p. 54. This included advice from the French Chief of the Air Staff, General Fay, and the commander of the air logistic support force in Indochina, Colonel Nicot, that such a strategy was unsupportable.

55. Ibid., p. 69.


58. Ibid., p. 67.

59. Ibid., p. 68.

60. Carver, op cit., p. 40.


62. Ibid., p. 114.
THE APPLICATION OF FALSE PRINCIPLES AND THE MISAPPLICATION OF VALID PRINCIPLES

63. Ibid.
64. Ibid., p. 116.
66. Middlebrook, op cit., p. 117.
67. Roger A. Beaumont, Military Elites. Indianapolis: Bobbs-Merrill Co., 1974, p. 4. The American Darby's Rangers were all but destroyed holding the Anzio bridgehead, the German 22nd Air Landed Division was rendered ineffective during operations against the Dutch in May 1940 while British airborne forces met with disaster at Arnhem in 1944.
70. Armitage and Mason, op cit., p. 27. In fact the operation had to be brought forward by a day because of the successful advance of United Nations' ground forces.
71. Ibid.
72. Ibid., p. 91.
75. Ibid., p. 34.
77. Short, op cit., p. 236.
78. Kornow, op cit., p. 231.
81. Komer, op cit., p. 84.
82. Thompson, op cit., p. 137.
83. Ibid., pp. 50-57.
85. Westmoreland, Soldier, op cit., p. 146.
88. Davidson, op cit., p. 529.

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Asian Defence Policies

By Major G.J. De Somer, RA Inf.

Introduction

ARTICLE VII of the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) restates the “right of any group of States to conclude regional treaties in order to assure the total absence of nuclear weapons”. Article VII is intended to encourage states to create barriers against the proliferation of nuclear weapons through the establishment of nuclear-weapon-free zones (NWFZs). These zones demand the total absence of nuclear weapons from the regions in question with commitments required from nuclear weapon states, and other extra-regional states, not to station weapons within the territory of the zone. The establishment of a NWFZ is not easily achieved and there is little likelihood that conflict-prone areas such as South Asia would become denuclearised through such treaties. Only one NWFZ regional arrangement has been concluded since the NPT came into force; the Treaty of Raratonga, which in 1986 established the South Pacific Nuclear Free Zone.

India regards nuclear disarmament proposals as attempts to thwart its modernisation and defence aspirations. This is partly why it opposes the NPT; the Missile Technology Control Regime (MTCR); the Comprehensive Test Ban Treaty (CTBT) and a NWFZ in South Asia. Pakistan tends to react to Indian policy and becomes at times equally wary of disarmament proposals, although it has proposed a regional nuclear test ban and NWFZ for South Asia. Pakistan considers these proposals as a way to keep political pressure on India and to demonstrate forthrightness to the United States. The NWFZ proposals of Pakistan are perceived by India as political manoeuvres to divert attention away from Pakistan’s nuclear ambitions and support of separatist insurgency within India.

The first section of this article will briefly review the Indian and Pakistani nuclear programmes. The second section will examine the proposals for the establishment of a NWFZ in South Asia and explain India’s opposition to such proposals. The third section will interpret recent developments in missile proliferation in South Asia and India’s veto of the CTBT. The article concludes that the Indian and Pakistani nuclear programmes are too developed to be reversed. Proposals for a NWFZ are treated with contempt by India because it considers it naive to view nuclear policy within a purely South Asia regional framework.

The Indian and Pakistani Nuclear Programmes

The nuclear programme in Pakistan was initiated in response to India’s and has probably now generated a modest level. Pakistan has developed this nuclear capability through a dedicated weapons programme. India’s weapons potential, in contrast, flows from a developing civilian nuclear power programme. Pakistan has tried to match India’s nuclear capability and this has affected Pakistan’s security and aid relationship with the United States. Pakistan is now driven by the belief that nuclear weapons represent the only option in terms of retaining a rough strategic parity with India.

Tensions between Pakistan and India remain, and have been exacerbated by the dispute over Kashmir. India has stressed that settlement of this issue must come before any discussion of their mutual relationship. Pakistan continues to link the nuclear issue with the dispute over Kashmir. Such a linkage is also based on the assumption that if India continues to refuse to negotiate with Pakistan over Kashmir, the United States will be further convinced of India’s intransigence.

India argues that its security is also dependent on relations with China. India’s strategic goal is to build a small but credible nuclear deterrent against China, which has a burgeoning nuclear arsenal. The South Asian nuclear situation really has to be approached in a global context because United States policy arises from global concerns and the Pakistani, Indian and Chinese programmes are all interrelated. China has shown little interest in taking steps that would alleviate Indian concerns, and until that happens, India claims, it cannot do much to ease Pakistan’s concerns.
The nuclear programmes in India and Pakistan, that experience overwhelming domestic support, are driven by powerful political, military and bureaucratic forces that use nationalism as their main vehicle. These programmes have a high degree of autonomy and are insulated from public scrutiny. The desire to seek international respect and prestige is also an important incentive for nuclearisation in both countries, but particularly for India. In the case of Pakistan, a powerful incentive for nuclearisation derives from the problems of national and historical identity. These factors all indicate that the Indian and Pakistani programmes cannot be reversed and that non-proliferation efforts should focus on establishing a regional weapons-control, rather than weapons-free, regime.

Proposal for a Nuclear Weapon Free Zone in South Asia

Following India’s testing of a nuclear device in 1974, Pakistan sponsored a resolution at the United Nations General Assembly calling for the establishment of a NWFZ in South Asia. The United States actively promotes NWFZs and nuclear non-proliferation in conflict-prone areas such as South Asia. Despite achieving widespread support at the United Nations and from most of the regional states, the zone has not been implemented because of Indian opposition.

Pakistan has also presented a series of bilateral proposals to India for both states to either simultaneously join the NPT or develop a bilateral inspection mechanism of each other’s nuclear facilities. In 1985 Pakistan and India agreed not to attack each other’s nuclear facilities, and to provide notification of military exercises and airspace violations. Both countries have also been exploring ways of developing mutual confidence building measures, but with little success to date. The Pakistani proposal in June 1991 for a Five Nations Conference to deal with the issue of a NWFZ was supported by the United States, Russia and China, however it was rejected immediately by India. Attempts such as these could be pursued further, as well as efforts to develop more comprehensive nuclear confidence-building measures between India and Pakistan with the goal of establishing a bilateral inspection system similar to the one between Argentina and Brazil.

The creation of any NWFZ is a politically symbolic step that is likely to be a protracted progress. The United States has opposed some NWFZs on the grounds that they could undermine its nuclear deterrence strategy, while accepting the creation of NWFZs in other regions. This apparent discriminatory approach relates to preservation of existing rights of passage through international seaways and airspace and ultimately United States national interest. The stated objective of the Clinton administration for South Asia now advocates: the prevention of nuclear and ballistic missile proliferation in South Asia; inhibiting the export of weapons of mass destruction (WMD) and related technology from South Asia; actively discouraging the export of WMD-related equipment and technology from other countries to South Asia; and promoting confidence building measures to reduce tensions and avoid conflicts that could escalate to the use of WMD.

The United States is of the view that the existing nuclear potential in South Asia requires a step-by-step approach, with the elimination of WMD as the long-term final objective. The United States strategy is one of damage limitation, not only with respect to the weapons themselves, but also in terms of its relations with India and Pakistan. The nuclear question has strained these relationships and made cooperation in other areas difficult.

The strategic, political, bureaucratic and nationalistic forces prevailing in South Asia make it extremely unlikely that India and Pakistan will agree to curb their nuclear programmes. These programmes are too advanced to be disbanded and external pressure is unlikely to be effective. The establishment of a NWFZ in South Asia is probably no longer possible as the necessary political and technical conditions do not appear to exist for developing such a zone in the region.

India’s Opposition to a Nuclear Weapon Free Zone in South Asia

India’s opposition to the creation of a South Asian NWFZ is based on the premise that such a zone would exclude the declared nuclear weapons powers, especially China. India also refuses to sign the NPT as it would entitle China to retain its nuclear weapons whilst denying the same option to India. The threat posed by China’s nuclear arsenal is of crucial strategic importance to India against which it is yet to develop a credible deterrent.

India argues that nuclear disarmament is a global, not a regional, issue and that lasting world peace can only be ensured by complete disarmament. India claims that the security offered by NWFZs is illusory given the global reach of nuclear weapons and the
fact that such zones can do nothing to reduce the existing level of nuclear stockpiles. Indian policy also reflects its great power ambitions and its understandable concern that a nuclear-free Indian subcontinent would be vulnerable to Chinese nuclear threats. India could clearly make a unilateral contribution to nuclear disarmament by disavowing nuclear weapons itself and acceding to the NPT, but it considers the NPT as discriminatory. India contends that the five declared nuclear countries want to preserve their dominance and that this is reflected in the 1995 indefinite extension of the NPT. India advocates a step-by-step approach to eliminate nuclear weapons within a definite time frame.

The prospects for any agreement on additional nuclear confidence-building measures are, at best, uncertain. Strong mutual suspicions would need to be overcome, while domestic instability in both countries makes it difficult for either side to accept limits on its nuclear weapon activities. Pakistan’s leadership is likely to be reluctant to constrain the nuclear programme as long as it confronts a politically ambitious India that is more powerful. India’s leaders regard their nuclear weapon programme as a response to Pakistan’s activities, a foil to China and as a basis for a claim to enhanced global status and prestige. Non-proliferation initiatives that focus simply on the confrontation between India and Pakistan will be opposed by India.

India is opposed to regional non-proliferation measures because such measures do not address its main security perspective which is the acquisition of a missile-based deterrent with respect to China. India states that it is ready to accept international measures, even if they circumscribe its own capability, provided that such measures are non-discriminatory and applicable to all. India, confronting two nuclear-capable adversaries and potential extra-regional threats, will steadfastly cling to its nuclear option in the absence of global denuclearisation.

Recent Developments

The problem of nuclear proliferation in South Asia is closely linked to the development, and deployment, of missiles in the region. The fact that Pakistan and India have acquired a nuclear weapons capability is almost an established fact. What is not clear is the extent to which they have managed to perfect delivery systems. A United States Intelligence Estimate warns that China is secretly helping Pakistan to build a factory for medium-range missiles. Pakistan may have also developed nuclear warheads to be placed on M-11 missiles (range of 320 km). China’s aid in the transfer of nuclear technology and Pakistan’s deployment of the missiles would be a breach of the 31-nation Missile Technology Control Regime (MTCR). Since 1991, the United States has twice imposed limited economic sanctions against China for selling M-11 missile launchers, finished missile components and nuclear related equipment to Pakistan.

India justifies its missile programme on the grounds that China has medium-range, intermediate-range, and intercontinental ballistic missiles deployed that can be targeted on the entire range of strategic targets in India. India’s civilian space programme is currently developing the polar satellite launch vehicle (PSLV) and the geostationary launch vehicle that will give India an undisputed ICBM capability. The United States has been urging India to stop this missile development programme on the grounds that it would fan tensions with Pakistan and China, accelerate the regional nuclear arms race and further complicate global arms control efforts. The deployment of missiles by India and Pakistan has introduced a new variable into South Asia with the acquisition of “first strike capabilities”.

India vetoed the adoption of the Comprehensive Test Ban Treaty (CTBT) by the 61 member disarmament conference in Geneva on 20 August 1996. On 11 September 1996, India was one of three United Nations member states that voted against the Australian sponsored accord banning nuclear explosions in the atmosphere, underground or in any other environment. Although India’s veto still prevents the treaty formally becoming international law, the text of the CTBT has been endorsed by the UN. Pakistan says that although it voted for the treaty it will not sign the CTBT unless India signs. India states that the CTBT does not bind the declared nuclear powers to a specific timetable for dismantling their arsenals. The Deve Government has also been angered by an entry into force provision and is insistent that the CTBT is discriminatory because it favours nations that already have nuclear weapons. The Deve Government has also referred to the advantage of the nuclear weapon states in their ability to refine their weaponry using computer simulation based upon data gained from past tests.

The linkage between the CTBT and nuclear disarmament was reaffirmed by the World Court’s advisory opinion on 8 July 1996. India’s rejection of the CTBT in the face of substantial international pressure should be seen as a measure to safeguard national pride as much as security.
the CTBT is for similar reasons as the refusal to consider Pakistani and United States’ proposals for the establishment of a South Asian NWFZ. India, in refusing to sign the CTBT, and to respond to NWFZ proposals, has led to divisions between those who see such initiatives as meaningless and those who believe India’s inflexibility could force India into an open nuclear programme.

Conclusion

The establishment of a NWFZ in South Asia is probably no longer possible as the necessary political and technical conditions do not appear to exist for developing such a zone in the region. The rival Indian and Pakistani nuclear programmes, where nationalism is a powerful driving force, are too developed to be reversed. Proposals for the establishment of a South Asia NWFZ have been treated with disdain by India which considers it naive to view nuclear policy within a purely South Asia regional framework. India is reluctant to enter into any agreement that does not settle outstanding political and territorial disputes and which freezes the nuclear situation in South Asia. India contends that it retains an option to make nuclear weapons not because of Pakistan, but due to China.

The deployment of missiles by the two powers has introduced a new variable with the acquisition of “first strike capabilities”. At the risk of isolation India has preserved with its nuclear option and advocates the CTBT is technically flawed and discriminatory, with no link to disarmament. Given the conviction, and degree of popular support that exists within India, it is doubtful that there will be significant shifts in Indian nuclear policy in the foreseeable future. Relentless pressure is only likely to provide the impetus for the development of India’s nuclear programme and to harden India’s stance. India will not give up the nuclear option in the foreseeable future without significant incentives. A treaty for world-wide disarmament would be the most effective way of promoting India’s demilitarisation.

NOTES

1. The United Nations also defined the basic legal requirements and conditions of crucial importance for the establishment of a NWFZ in a resolution adopted by the General Assembly in 1975.
2. The only other treaty which sought to establish a NWFZ is the Treaty of Tlatelco. The Treaty of Tlatelco, signed in 1967 before the NPT, aimed to create a Latin American NWFZ and is yet to be fully implemented. However, ASEAN recently passed a resolution on a South-East Asian Nuclear Free Zone Treaty. Likewise an African Nuclear Free Zone Treaty has recently been signed.
3. The Pakistani nuclear programme, launched in 1972, was based on the network of nuclear espionage, smuggling and nuclear collaboration with China. Pakistan declared in 1992 that it has the capability to construct at least one nuclear weapon. See B. Chellaney, “The Challenge of Nuclear Arms Control in South Asia”, Survival, Vol 20, No. 1, Autumn, 1993, p.129.
4. The Indian nuclear programme dates back to 1948.
8. China launched its nuclear weapons drive after the start of the Indian programme but has left India far behind in the technological race.
10. Since 1991, Pakistan has frequently repeated this proposal.
13. Chellaney, op cit. p.129. There is also the significant practical problem of accounting for all the weapons-grade fissile material already produced by India and Pakistan.
15. The most viable Indian deterrent would be the capability to strike at Chinese population centres with weapons of megaton yield.
16. A large number of Pakistani academics and strategists also view the NPT regime as discriminatory.
21. This would give Pakistan a weapon equal to India’s domestically produced Prithvi ballistic missile.
23. The US had at its disposal the “Pressler Amendment” as the legislative basis to enable it to impose sanctions and more recently the “Brown Amendment”.
28. The other two were Bhutan and Libya.
BIBLIOGRAPHY

Books

Journals


Articles
Downer, A. “So much hangs on India’s vote”, The Australian, 11 September 1996.
Kulkarni, V.G. “No War, No Peace”, Far Eastern Economic Review, 11 April, 1996. Also adjoining the article is an interview with the then Indian Prime Minister P.V. Narasimha Rao, “The Indian High Road: Rao stresses talks on Kashmir and more trade”.
Stewart, C. “UN to accept Canberra plan for N-test ban”, The Australian, 6 September 1996.
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- Your unit commander or manager will also be given an information kit and facts sheets; and
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Weapons Proliferation and Regional Security

By Major M. J. Dugdale, RA Sigs.

"There have been more conflicts in Asia in the last 50 years than in any other part of the world, except for the Middle East. This recent legacy of ideological and military conflict means that Asia has been unable to formulate either an effective regionalism or local arms control regimes. There is no wider pattern of Asian security that embraces balances of power, conflict resolution, alliances and arms control."

Introduction

The above quote from Professor Paul Dibb succinctly describes the potential for conflict in Asia. Though in the rest of the world there is a growing erosion of sovereignty and declining emphasis on the nation state as the focus of the concept of security in favour of regional and global security, in the Asia-Pacific region this is not so evident. Many countries in the region, long in the shadow of bipolar strategic alliances, are exhibiting nationalism and striving to satisfy long suppressed regional ambitions. Military prowess is a major element of national power and considered a determinant of national status, both in terms of a country's own arsenal as well as its ability to develop and manufacture weapons. The decentralised nature of the international security system together with the lack of collective security measures in the Asia-Pacific, when viewed in the context of simmering territorial and political rivalries in the region, account for the increase in military spending in the region when most other regions are reducing military expenditure. This is exacerbated by the availability of cheap arms from downsizing western forces and the former USSR, and the need some nations feel to increase their national status. This latter applies equally to the developing nations as well as those supplying weapons.

International arms trading in Asia-Pacific has developed from the provision of obsolescent weapons supplied to allies in the 1950s to the current widespread export of high technology weapons, their components and technical assistance to a range of states with greater emphasis on the commercial and strategic benefits than on compliance with past alliance structures. A principal reason for producing and exporting arms is the perception of national sovereignty. In India and North Korea, for example, the defence industry sector has symbolic importance as an indicator of modernisation, with weapons technology contributing to technical advancement in production and management techniques that can be applied in commercial industries.

The diffusion of industrial and military capacity to developing states is characteristic in an international system no longer dominated by a few great powers. Together with the declining influence of regional powers' traditional foreign policy approaches, the proliferation of weapons in the region poses a significant threat to regional security and stability.

This article will discuss the proliferation of nuclear, ballistic missile and conventional military technology to the developing states of the Asia-Pacific and the potential to destabilise regional security. The discussion will commence with an overview of the generic effect of such weapons proliferation, and then proceed to the roles of China, North Korea, Singapore, India and Australia as arms suppliers.

Proliferation Issues

The proliferation of nuclear and missile technology has become a deliberate instrument of policy. As proven during the Cold War, the fear of the effects of nuclear weapons is such that states will seek to avoid conflict that could escalate to this level, but will attempt to reach parity with a nuclear state in order to gain bargaining power. The same theory does not necessarily hold for the possession of delivery systems such as ballistic missiles. The threat they pose can turn tension into a crisis without the weapons themselves having to be deployed. This can be seen in the way both India and North Korea use this technology as political leverage on the international stage.

The Strategic Studies Institute (SSI) believes that "by the year 2006 most Asia-Pacific nations will possess the technology, and many will have the
capability, to produce chemical, biological and even nuclear weapons. Even so, the SSI notes that the more destabilising developments such as deployment of these weapons is less likely to occur. Regional disputes are likely to be resolved without conflict provided the US maintains a forward presence in the region. This may well be the case for unconventional weapons since outcomes are apocalyptic, but this author believes that it is still quite likely that the use of conventional weapons by developing states will occur. This is particularly so given the large numbers of conventional weapons making their way into the Asia-Pacific region, a situation that could be likened to an arms race.

It is the proliferation of ballistic missiles that represents the biggest threat to regional stability. Acquisition of ballistic missile technology is not necessarily related to any perceived military threats, nor does it actually reveal much about a country’s military intentions, since acquisition may be politically motivated to increase national status. Ballistic missiles are particularly attractive to developing nations as they are perceived as providing enhanced military power. They are relatively lower cost solutions with less demands on infrastructure support than conventional weapons platforms compared with their end-use effects. There are also strategic and political effects on neighbouring states resulting from the acquisition of ballistic missiles, that do not actually require the deployment of the weapons. However, the consequences of missile proliferation are very much dependent on the existing regional tensions.

The transition of developing states to access missile technology will have political repercussions ahead of their programmes’ abilities to achieve military effectiveness with the weapons themselves. The acquisition of missile technology is a tangible example of developing countries’ wanting to have the means to support national interests and ambitions for regional influence that can reduce the impact of the regional great powers. Since much of the missile technology is increasingly being traded between third world nations the ability of industrial/western powers to influence its proliferation is markedly reduced. The imposition of trade restrictions or supply-side diplomacy will have little effect. Many of the developing states view the moves by powerful states to impose non-proliferation as hypocrisy given the considerable arsenals held by the large powers. The proliferation of ballistic missiles shows that the prospects for conflict between developing nations is increasing, especially in South East Asia. Great power nations have less influence over the developing nations due to the end of the Cold War bipolar alignments, the increased economic stature of developing countries, and the developing states’ changed emphasis from internal politics to external political and security issues.

Missiles tend to have more stringent export controls than conventional technology as they provide a link to nuclear proliferation. The Missile Technology Control Regime (MTCR) was formalised in 1987 and although it places missile restraint on the broader diplomatic agenda as a way to control regional tensions, the MTCR has no international agency to monitor compliance and no enforcement mechanisms. In addition, neither China nor North Korea are signatories to the complete agreement. Though there are moves to increase the effectiveness of the MTCR and the UN Arms Trade Register, this is unlikely to be achieved before a number of developing states in the Asia-Pacific field ballistic missile systems supplied by other nations within the region. The export of missiles and their technology to the region is well documented from China and North Korea.

With the weakening of security constraints and connections post-Cold War the smaller developing states may feel more isolated in the region and less inhibited about using military means to protect national interests. In addition, developing states are less likely to have credible and established intelligence systems to verify their relative positions in a conflict and so may assume the worst and resort to deploying military forces when such means may not be justified. It is also less likely that established and practiced command and control procedures for the use of new military technology exists in the developing states, and this further increases the fear of accidental or unauthorised use of weapons. The proliferation of nuclear, ballistic missile and sophisticated conventional weaponry in the area can only exacerbate an already uncertain security picture.

China

China has long term aspirations to become a dominant regional and continental power and is a leading supplier of conventional weapons, missiles, missile technology and nuclear technology. The export of China’s missiles and technical assistance "represents the world’s most comprehensive program of transfer of missile technology." Most of these transfers are occurring to volatile parts of the region. Arms from Beijing stock the arsenals of Pakistan, Sri
However, China's arms exports are not driven by economic controls, have meant that the military has been forced down the path of weapons exporting as the severe structural pressures to reform the economy, together with decentralisation of economic controls, have meant that the military has had to promote exports to finance its modernisation. However, China's arms exports are not driven by solely economic reasons since "China expects a profit from those who can afford to pay, payment at cost for friends who can afford it, and payment well below cost for those who cannot".10

Political and strategic considerations are a major factor and arms transfers are actively sought, including marketing to non-traditional trading partners. Beijing considers arms exports to be a legitimate action in pursuit of enforcing national interests. China's arms transfers, like its pursuit of its territorial claims, will be pursued outside multilateral control efforts by ASEAN, MTCR and the UN Arms Trade Register. China may have recently agreed to become a signatory to the Nuclear Non-Proliferation Treaty (NPT) but it remains the leading example of an exporter of missile technology which is not a full member of the MTCR. Since China has agreed to adhere only to the original guidelines of the MTCR, that is concerning the actual transfer of missiles, the recent emphasis by China on transferring missile components and technical assistance is probably Beijing's attempt to circumvent political pressure under the MTCR. There is evidence that China covertly exports missile technology to countries in Asia, including Pakistan and North Korea.

With the end of the Iran/Iraq War, the display of more modern weaponry in Desert Storm, the increased availability of high technology second-hand weaponry and the downsizing of many of the world’s military forces, Chinese arms exports should have begun a downward trend after the late 1980s. This did not occur. Arms exports increase an average of 20 per cent per year, and 93 per cent of its arms go to the developing nations of Pakistan, Bangladesh, Burma and Thailand.11 China’s strategic rivalry with India and Vietnam drive much of the arms transfer. China has a 10 year agreement with Pakistan for research, development and co-production of missiles, submarines and nuclear weapons.12 The withdrawal of Vietnamese forces from Cambodia did not cause China to decrease arms sales to either Cambodia or Thailand. China is still seeking to extend its influence and disadvantage both India and Vietnam. It is not the outright sales of weapons but the nurturing of indigenous arms producing capacity that is of greatest concern. China's concentration on exporting military technology and assistance leaves the client states with the ability to become arms exporters as well, further complicating the pursuit of regional security cooperation and multilateral resolution of disputes. This serves to reinforce China's strategic interests in dominating the region and preventing the establishment of a regional power bloc that could focus on counter-balancing China's growing power.
Almost all territorial disputes in the region involve China. Its position as an arms supplier to many of the developing nations in the region wields influence over the political leanings of the smaller countries thus furthering China's claims in the region and its ambitions. China's actions in supplying weapons to developing states further muddies the waters of regional relations. For ASEAN in particular there is increasing complexity in possible threat scenarios and China is succeeding in diverting regional focus to the military capabilities and intentions of developing nations in the region. Beijing is resisting the apparent ASEAN strategy to enmesh it in a network of regional and bilateral relations, and China's widespread arms market to non-ASEAN states is symptomatic of this.

China in some cases believes that the transfer of nuclear and missile technology is not destabilising but in fact establishes a “level playing field”. This has been the view taken regarding support to Pakistan in its relations with a nuclearised India, and support to North Korea against the nuclear might of the US backing of South Korea and Japan. Because it is one of the five acknowledged nuclear powers China is central to constraining the spread of nuclear weapons and technology. Whether or not there is any basis in this argument as a strategic equilibrium, it does not detract from the fact that supply of arms to the developing countries in the region has diverted some military attention from China and effectively expanded China's strategic boundaries beyond its own territory.

North Korea

North Korea's political and economic demise have been reflected in the state of its defence industry. It has fallen from one of only two manufacturers of major weapons systems in the region in the 1960s to being considered a less significant supplier in the 1990s, having been outpaced by China, South Korea, Japan and Taiwan in weapons development. Nevertheless, North Korea still ranks as the second largest regional arms exporter with its defence industry supporting indigenous manufacture of naval vessels, aircraft, guns and small arms.

Pyongyang has developed an extensive defence industry, with design experience as well as production of equipments under license. Its ability to provide ongoing support and technical assistance to developing nations is viewed favourably, as is the fact that many of its weapons are either copies or derived from Chinese weapons supplied to North Korea, thus simplifying integration of a range of equipments into a force inventory. Chinese weapons are also sold via North Korea acting as an agent for Beijing. With assistance from Beijing, North Korea became a major exporter of missiles and missile technology in the late-1980s. Most of these exports are to countries in the Middle East though there is suspicion of exports to developing nations such as Pakistan, Burma and Thailand. Pyongyang can be expected to exploit the desire of developing states for missile technology.

North Korea claims to have suspended its nuclear programme and suspected nuclear weapons development. However, there are still believed to be extensive developments of chemical and biological weapons. North Korea already has considerable production capacity for conventional weapons and strong export markets. Given the failing economy, the temptation to export weapons of mass destruction to bring in sorely needed funding will be great, and there is some evidence that nuclear weapons technology has already been exported. Since the country's own readiness and capability to attack South Korea has been eroded by economic and natural disasters in recent years, the export of weapons not only represents relatively easy income but also maintains some regional influence. Arms export is one of the few means North Korea has allowed for itself to interact with its region.

Of great danger for the future is the likelihood that the present North Korean system cannot be sustained without significant political and economic reforms. The economic crisis facing the country poses a significant problem for the proliferation of weapons in the region and there is hence great uncertainty about North Korea's intentions for its defence industry and role as an arms supplier.

India

India is a small arms supplier on the world market. Its sales to developing nations in Asia-Pacific are relatively small compared to China and North Korea and its motivations are less disturbing. India views its defence industry as an essential part of its national prestige. It seeks great power status and is engaged in strategic rivalry with China, but the development of its arms production capability stemmed primarily from the loss of its major ally and arms supplier, the USSR. India was forced to rapidly expand its defence industry to move toward self-reliance if it was to ensure its strategic position in
South Asia. A further cause of India's rise as an arms supplier was economic gain, particularly after India had to approach the World Bank for massive loans in the late-1980s. The repayments of these loans and the ongoing economic crisis in the country required India to seek a rapid increase in exports. One of the most obvious means was arms exports, though the majority of India's output is to the forces in the former USSR, and the provision of components to established defence industries in countries such as Singapore.

With the strong economic purpose behind its arms exports and India's relative strategic isolation in the region, there are few restrictions on any future expansion of its arms exports to the region.

Though India refuses to become a signatory to the NPT, claiming that it would be disadvantaged in its strategic position, there is no evidence that India has engaged in the export of nuclear technology. However, its developments in missile technology and known nuclear status have triggered further instability in South Asia. India has a strong capability to reverse-engineer equipments; it has been able to adapt space launch vehicle technology provided by the USSR to develop ballistic missiles. The major consequence of this development has been the escalation of the arms race with Pakistan. Not only was Pakistan driven to acquire ballistic missiles and a manufacturing capability, but it also sought nuclearisation to match India's potential to deliver nuclear weapons via its missiles.

**Singapore**

Singapore is intent on protecting its thriving economy and growing influence, and accordingly has sought to become self-reliant in defence production. This approach is actively pursued by the government, with arms exports reducing the cost of equipping the Singapore Defence Force. Though Singapore has an extensive ship building capability, the largest in ASEAN, and an expanding weapons export potential, its overall capability as an arms supplier is relatively small. Singapore does however concentrate on supplying arms to its region, with the sale of ships and small arms to countries such as Bangladesh, Brunei, Burma, India, Malaysia, Thailand and the Philippines.

Until recently Singapore had limited capability or reason to expand its defence industries. The moves by many ASEAN states to review force structures and commence re-equipping programmes has seen Singapore move to meet the increased regional demands for sophisticated conventional weapons. At this stage there does not appear to be any intention to progress to production of ballistic missiles.

It can be expected that Singapore will continue to pursue arms exports to regional developing states, however the potential for this to destabilise the region is small given that none of its indigenous weapons systems are power projection platforms or weapons of strategic value.

**Australia**

Australia’s activities as an arms exporter are almost insignificant. The motivation is economic, not so much in raw dollar terms but in order to amortise the high cost of maintaining an indigenous defence industry that is a feature of Australia’s defence policy. The need to move toward self-reliance, and the importance of defence industry, is clearly articulated in the Defence White Paper *Defending Australia 1994*.

Australia’s exports are primarily in small arms, ammunition, communications-electronics and components. There is little potential in these to act as destabilising influences since they do not represent power projection capabilities, particularly given the large number of conventional weapons already available on the open market post the Cold War. ANZAC frigates have been exported to New Zealand and Australia has an established capability for the production of submarines through the Collins Class submarine project, though the export of these platforms is yet to be developed. Further, Australia has a well established arms export policy that requires all exports to be reviewed in terms of the flow-on effects to regional security. This has been strengthened since the proposed mid-1980s sale of used Mirage aircraft to Pakistan was cancelled following protests by India about Australia’s motives for regional security.

Though Australia has entered into minor export deals for weapons platforms such as frigates, these tend to be with developed countries that have trusted control measures in place and whose proposed military and political use of the weapons is known. Australia provides some weapons and military advice, especially patrol boats and communications equipment, to smaller nations in the South West Pacific under the Defence Cooperation Programme. This programme is aimed not only at improving diplomatic relations with these nations but also at ensuring that they have some self-defence capability.
This assistance is not aimed at inciting these developing nations to become a source of regional tension, nor is the programme viewed in this light by the region.

**Conclusion**

Whereas past decades have seen the export of complete weapons systems, developing nations are now seeking to acquire the earlier stages in the production cycle and the ability to manufacture their own weapons systems. This can be expected to continue towards the less tangible elements of the process such as components, technical expertise and design knowledge, all of which can be considered dual-use technology. It will become increasingly difficult to control or even track the export of such technology, and to assess the impact it will have on the force structures and intents of developing nations. The indigenous production of weapons technology and components acts as both a source of export revenue and a means to develop new diplomatic relations.

The expectation of people in developing states is rising and these states are finding it more difficult to compete with regional powers. The short-term solution is for the developing states to boost national power and prestige through more capable military forces. The drive for technical literacy and political empowerment will guide developing nations down the path of military expansionism as a method of influencing the region. The wild card resulting from this is regional instability. Moreover, the ready availability of arms reduces in these states their former dependence on alliances and diplomatic conflict resolution; military solutions move closer to being a first or second rather than a last resort in resolving disputes.

The nations supplying arms to the developing states in the Asia-Pacific will be fuelling any future conflict. The most important regional arms supplier is China, and it is clearly establishing a pattern to achieve its ambitions for regional hegemony. North Korea has some influence via weapons sales to developing nations, and the uncertainty of its future raises questions about the extent to which North Korea will pursue weapons exports to prop up its ailing economy and political system. India may seek to expand its exports further in the Asia-Pacific region, but to date its defence industry has affected the stability of South Asia more than the greater region. Singapore and Australia are of lesser importance as arms suppliers and will not destabilise regional security.

The role China plays is a significant factor in the strategic balance in the Asia-Pacific. China’s growing nuclear capability and propensity for furnishing arms to the region represents a huge concern for the region, especially the ASEAN states which are generally not the recipients of China’s arms transfers. Since China views arms export as an issue of national sovereignty it is likely that its export of conventional, ballistic missile and nuclear weapons technology will continue, both to place it firmly in a position where its regional dominance is not only represented by its indigenous military strength but by the military and political dependence of surrounding developing states, thus expanding Chinese “controlled” territory beyond its geographic boundaries. Chinese arms exports are not just business deals but are viewed by China as a central part of the political, strategic and economic policies. The principal arms control threat to the region is the proliferation of Chinese advanced weapons and technical assistance.

The high rate of economic growth in the Asia-Pacific region will continue for many more years and will continue to fuel regional ambitions. Inevitably, developing nations reaching for national status will seek military power. Therefore, the diffusion of high technology weapons, components and technical expertise in nuclear, missile and conventional weapons will be a major determinant of regional security. Though many developing nations may simply be seeking to maintain a military equilibrium with near neighbours or to gain some political influence in the region, the simple fact of a greatly increased number and variety of weapons platforms in close proximity together with regional suspicions about the reasons for their procurement, will lead to increased tensions and an inherently dangerous security environment. The proliferation of nuclear, ballistic missile and sophisticated conventional weaponry poses a major security threat to the region. In conjunction with the rise in arms exports, particularly by China, the lack of effort by the Asia-Pacific states to develop arms control regimes will further destabilise the region.

**NOTES**

WEAPONS PROLIFERATION AND REGIONAL SECURITY

4. ibid., p.108
5. ibid., pp.113-114.
7. ibid., p.3.
8. ibid., p.4.
9. ibid., p.22.
10. ibid., p.23.
11. ibid., p.8.
12. ibid., p.11.

BIBLIOGRAPHY

Books

Articles

Reference Books

Major Dugdale graduated from WRAAC in 1982. She has held a variety of corps and non-corps postings including HQADF, OS 73 Electronic Warfare Squadron, 7 Signal Regiment EW, project manager in Materiel Division, Army, instructor at the School of Signals and Contingent Commander, Exercise Long Look. Major Dugdale completed Army Command at Staff College in 1992 and is currently studying for a Masters of Defence Studies and International Relations through the Deakin University.
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Development of Japanese Defence Policy During the Cold War: The Legacy of Dependence

By Major R. L. Jones, RA Inf.

"The habit of dependence grows bit by bit: if a nation first becomes accustomed to relying on another for some of its essential needs it risks becoming incapable of freeing itself."

Charles de Gaulle

Introduction

In the period August/October 1991 Japanese policy makers found themselves in a political quandary. Quick to react to the initial invasion of Kuwait the country’s leaders found they were unable to develop policy responses commensurate with their position as a world power. Debate over whether to deploy forces to support the UN contingent became bogged down over legalities related to the constitution. This dilemma was to deteriorate to the stage where political debate on the issue was not about what Japan could do, but rather what couldn’t be done. Why did Japan, who had interests vital to its economic prosperity at threat due to the Gulf War, respond as it did, in a manner that was regarded as limited and which led commentators to question whether Japan had in fact developed into a world power? To understand this situation and to address the questions that it raises an examination of Japanese defence policy since World War II (WWII) is required.

It can be argued that Japanese Defence Policy during the Cold War era was dominated by three factors. The legacy of its involvement in WWII, the nuclear attacks on Hiroshima and Nagasaki and the dominant relationship with the United States of America. Defence policy, however, is not developed in isolation and therefore these factors need to be considered within the overall context of policy development in Japan. Nor was Japanese defence policy as static as may be construed by a cursory examination of political debate.

In this article it is intended to examine the development of Japanese Defence Policy from the end of WWII until the early 1980s. That is the greater part of the Cold War era. It is intended to detail the outline history of this policy development, to examine the development of policy and the impact of such factors as the constitution and the US-Japan Alliance. An examination of the geo-strategic situation and its impact will also be addressed briefly as will the influence of public opinion. Japanese Defence Policy developments will also be compared with similar issues as they developed in the Federal Republic of Germany (FRG).

Global Perspective in the Cold War

Defence policy is developed within the context of national foreign policy and objectives. Security issues tended to dominate this policy area during the Cold War era. During the period of the Cold War the dominant theory of international relations, particularly in the earlier years, was that of bi-polar balance of power which led to various theories of deterrence. Camelleri has argued that this theory has been changed to suit the circumstances from whatever perspective was advantageous at a particular time or place. He argues that the theory rests on the premise that there is a need for states to exert their power in such a way that no one state or group of states achieves hegemony. When the balance of power shifts states need to respond to ensure an equilibrium is again achieved. However, for a stable balance to remain there must exist a large and, according to Camelleri, odd number of major powers.

While it is apparent that the last point was not the case during the period of the Cold War, balance of power theory held sway and it was in this context that Japan’s foreign policy, including its defence policy, developed. Bipolar rivalry evolving when the international situation was inherently unstable, due to the absence of a balancing power or powers, led to the concept of deterrence and had an impact directly on the arms’ race of the 1950s and 1960s. While Camelleri argues that pure balance of power theory was not applicable during this period, many policy makers referred to or relied on it to justify policy decisions or directions. It is arguable whether balance of power considerations were particularly high on the policy agenda of the Japanese Government during the
formative years of its relationship with the US. However it is still relevant given the views of such policy makers as John Foster Dulles, Secretary of State for the USA, in relation to a perceived role for Japan during the 1950s, which will be touched on later in this article.

Inherently “power based” models in political theory have a tendency to reinforce established political structures. In addition such models are predicated on an assumption that international behaviour of states is rational and that the primary objective of most actors, in most instances, is to avoid war. Such models tend to have a fundamental assumption that individual states have pro-active policy development. This assumption is undermined when analysing defence policy in the Japanese context as much of the criticism of Japan is that it has been a passive actor in this sphere. This targets directly the policy impasse reached by Japan in 1991.

**Japanese Security Policy Issues and Development**

Japanese security policy during the period from 1945 up to the 1980s was not static. It did change as the international environment changed. To summarise; the policy has gone through a series of phases since the end of WWII. From 1945-50 Japan was basically demilitarised in an attempt to ensure it did not again become a threat, particularly to the USA or its interests. With the outbreak of the Korean War and the existence of the Cold War scenario, Japan was forced to take on greater responsibility for its own defence. This was maintained at minimal levels to achieve “self-defence” within as close a literal translation of the peace article of the constitution as was possible and also be able to meet the demands of the USA. This policy saw a gradual build-up of the Self Defence Force (SDF) from 1955 to 1968. During the period from 1969 to 1978 the strategic situation changed dramatically in East Asia with the formation of ASEAN and the defeat of the US in Indo-China plus “detente” between the US and China. Japan went through a phase of “qualitative modernisation” which coincided with the changes in US policy, and the withdrawal of US ground troops from the Southeast Asian mainland. This was done while ostensibly maintaining defence spending within the government’s self imposed limit of 1 per cent of GDP (it should be noted that this costing did not include wages and salaries). Finally in the period up to 1988, while there was no fundamental changes to Japan’s actual policy, greater debate and some radical changes to defence posture occurred. These changes were, it was argued, a reflection of attempts to play a greater role in the region, without creating anxiety amongst neighbouring nations, plus an effort to change the level of the debate on security matters in general within Japan.

**1950 to 1965: The Era of Pax America**

Immediately after WWII Japan was occupied and administered by the USA. As stated above the aim was to ensure the demilitarisation of Japan. The Korean War, however, changed the environment to such a degree that Japan was forced to change its policy, by the USA. In August 1950 a Police Reserve Force of 75,000 was established by direction of General Macarthur. After a series of name and minor structural changes this force formed the basis for the
establishment, in 1954, of the SDF. In 1957 a Basic Defence Policy was articulated which had four facets. These were: support of the UN to realise international cooperation and world peace, emphasis on stability within the polity and enhanced patriotism to secure national safety, gradual development of the SDF to meet the needs of the nation's defence posture and situation and reliance on the joint security system with USA as the major deterrent force until the commencement of UN involvement. In short this could be summarised as support to the UN, economic growth, minimum possible defence effort and reliance on the USA Alliance.

It should be noted that the policy settings in the early 1950s were not necessarily those that the USA may have desired. It has been stated that John Foster Dulles, then US Secretary of State, had wanted direct Japanese troop involvement in the Korean conflict but that the Japanese Government refused.1 Japan consistently, throughout the period of the Cold War, drew a sharp line between what it perceived as its legitimate defence needs and involvement in collective security. Whilst much of the public support for a policy of "passive defence" or "defensive defence" or any other such term was the trauma of WWII and the impact on the nation of the nuclear attacks on Hiroshima and Nagasaki, it was the institutionalisation of these feelings in Article 9 of the constitution where this impact was manifested. In Article 9 the Japanese legislated that they would:

"forever renounce war as a sovereign right of the nation and the threat or use of force as a means of settling international disputes" it further stated that "to accomplish the aim of the preceding paragraph, land sea and air forces, as well as other war potential, will never be maintained".

This article became the fallback position of many Japanese leaders and commentators over the next 30 years and, if interpreted literally, can be seen as justification for the consistent policy of non-involvement in external military activities that has been followed. However the argument is undermined by the flexibility in interpretation that has been followed to allow for the growth of the SDF. As early as 1952 Prime Minister Yoshida was arguing that "war potential" was different to "defence potential" and that therefore limited defence forces were "legal".2

In addition to the Constitutional factors Japan's relationship with the USA greatly influenced the development of Japan's Defence Policy in this period. The alliance signed between the two nations in 1952 and revised in 1960 is unique in that there is limited recipricosity. Article 5 of the US-Japan Security Treaty provides for joint action if there is an attack on Japan. In addition Article 6 allows for stationing of US troops and establishment of bases in Japan. Unlike other treaties the US brokered after WWII, there is no requirement for a collective response if there is aggression on either signatory, as in the case of NATO or ANZUS. Japan therefore could develop policies without the imperative of the need to consider security responses or an expected security commitment unless the "homeland" itself was under direct threat. This was a luxury no other USA Ally enjoyed.

For comparison this situation and the responses articulated can be compared to the situation of the FRG after WWII. The FRG after 1945, unlike Japan, was to be divided and was occupied and administered by all four Allies in discrete zones. While the initial aims of the Allies were the same as the US in Japan, to ensure Germany did not again become a military threat, this situation was also overtaken by the events resulting in the state of cold war between the superpowers. J. F. Kouer argues that there was resistance to rearming and being integrated into the European Alliance by the public. This however was coloured to a large degree by the desire to achieve unification rather than overt pacifism. The left wanted to avoid the hostility of the Soviets which could lead to obstruction to eventual unification, and the right felt that incorporation into the alliance, combined with the political division of the state, would undermine nationalism.3

Regardless of these factors by 1954 the FRG was integrated into the Western Alliance. Gina Cowen argues that this was motivated by a desire for reconciliation and political rehabilitation with the West. By joining, she argues, the FRG also was absolved of the need to formulate an independent defence policy.4 While this is supported to a degree by the establishment of the National Army in 1954 on the basis that it was integral and under command of NATO HQ, it is arguable whether the FRG at that point in its history would have had many options. The German strategic location, the sizes and types of forces involved, the dominant strategies of that time, its political division into the two "superpower camps" and the geography of Europe was such that in the event of conflict the FRG would not only be actively involved but would find itself the "main battlefield". The German situation by 1955 meant that it was both "the symbol and the stage" of the Cold War.

Both these countries found themselves in positions of weakness. In a world which was rapidly coalescing into two "superpower blocks" their
geo-strategic locations meant that it would be difficult for them to remain uninvolved. While in terms of superpower rivalry their impact at that time was minimal the USA was clearly following policies based on balance of power theories. That is to ensure it maintained sufficient power to contain the Soviets there was a need for pro-US forces in central Europe and in East Asia. Both Japan and the FRG joined the Western power “bloc” for policies based on self interest whether to enable reconstruction and trade or political rehabilitation. Japan resisted commitment to collective defence ostensibly due to its constitution and pacifist policies. However it is arguable whether this would have been possible had East Asia and Japan, at that time, been the centre of cold war confrontation, the situation in Europe and that in which the FRG found itself.

Avery Goldstien has argued that alliances such as those that were established in the 1950s reinforced but did not change balance of power characteristics. He argued that small powers, such as Japan and the FRG, were forced to join if they felt threatened and that loyalty and deference were the cost to ensure they had “superpower” protection. This is probably true of a country such as Australia which openly sought alliances with the USA as a bulwark against perceived threats from the Japanese and later China. However it fails to adequately address the situation the Japanese found themselves in at that time in the middle of reconstructing their economy, desperately wanting regional stability, and keen to continue the process of political rehabilitation. These issues as much as a desire for protection influenced policy making.

By the mid to late 1950s there were three fundamental tenets underlying Japanese defence policy. These were firstly the pacifist Article 9 of the constitution as detailed earlier. The second was the US-Japan Alliance also detailed above and the third was the three non-nuclear principles of non possession of nuclear weapons, non production of nuclear weapons and non introduction into Japan of nuclear weapons. These fundamental tenets remained unaltered in substance throughout the period.

From the mid to late 1950s through to the late 1960s was a period of dominance by the USA. In security matters Japan continued to follow a policy of working within the framework of USA Asian Diplomacy and Cold War Strategy. However Japan also concentrated on economic growth as the dominant factor in its international relations, using overseas aid and trading to build a complex set of relationships to enhance stability from its perspective, particularly in East Asia. From a perspective of development of defence policy this was a period of slow, quiet non-confrontational expansion and improvement of the quality of the SDF. There was a general unease with matters specifically related to this particular area of government policy. This was a legacy of Japan’s role in WWII, and as a result political considerations generally overrode security aspects.


This situation began to change in the late 1960s as the security environment changed. In the late 1960s hostility between USSR and PRC led to an increase in Soviet forces in the East. In 1969 Nixon proclaimed the “Guam Doctrine” which in essence meant that alliance partners would be expected to share more of the effort for their own security. This was followed by the withdrawal of US ground troops from the mainland of South East Asia as a result of the Paris Peace Accord in 1973. It was also from this time that there was a perception of relative decline, whether real or illusory, of military power between the USA and Soviet Union. Pressure from the USA for a greater security role by Japan, plus changes in the domestic and international situation led to a change from a purely structural approach to the defence problem to the articulation of policy guidelines.

In 1976 the Miki Government announced a National Defence Policy Outline or “Taiko”. Emphasis was placed on a more conventional defence policy, however this policy was still to be constrained by the ceiling on expenditure at one per cent of GDP, a factor that had applied de facto in any case for some years. Force levels were to be such as to be able to repel small to medium scale attacks, but the policy was based on the assumption that there was little likelihood of major aggression against Japan itself. The enactment of the policy was to attempt a qualitative upgrading of forces including, importantly, command and control systems. This development was put into perspective by the statements of Prime Minister Fukuda when he explained, on a tour of ASEAN states, that Japan would not become a military power. It would rely on social, cultural and economic ties to enhance security within the region, which it was argued, was a re-statement of ongoing post-WWII Japanese foreign policy.

By the early 1980s Japan was a major economic power. While the policy doctrine of minimal political involvement remained paramount, a policy that had
dominated the debate in Japan since 1945, the debate on its role within the region was becoming more open. Despite this debate public opinion within Japan about defence issues had not changed greatly since WWII. The rhetoric at government and elite levels had increased in isolation due to a growth in the awareness of a possible threat from the Soviet Union as well as some doubts about the ability and determination of the US to meet its commitments to Japan. Some commentators believed that the USSR had, in fact, achieved nuclear superiority along with the conventional force build-up that had occurred in the region. A reflection of this increased concern plus the result of increased US pressure was the agreement in 1981 by Prime Minister Suzuki that Japan would seek to make greater [defence] efforts and accept greater responsibility for defence of its surrounding sea and airspace. This policy change meant a substantial increase in maritime and air assets and resulted in the policy decision to extend naval responsibility out to 1000 nautical miles. This policy change was not without some severe criticism from within the Japanese media and general public.

But had Japan’s overall defence posture and policy really changed significantly since the late 1960s? The three fundamentals of compliance with Article 9 of the constitution, the US-Japan Alliance and the three non-nuclear principles were still in place. Rhetoric at the elite level had adjusted in an effort to meet criticism, mainly from the USA, but force structures in the early 1980s were still well below those originally envisaged in the 1976 “Taiko”. In addition the one per cent ceiling on defence spending was still extant and public opinion against deploying troops overseas was still strong. Command and control systems for joint action had not been developed and force projection capability was still limited. While Japan’s economic and foreign policies showed many of the characteristics of complex interdependence, defence policy, apart from rhetoric and some minor changes to force structure, remained in a virtual policy vacuum at the higher political levels. Defence policy was largely left in the realm of administering the forces rather that determining roles and missions within the region to aid stability.

Unlike other middle powers, such as the FRG in Europe, Japan did not appear to come under the same institutional pressures both from within and without to develop more pro-active security policy positions. This was primarily due to the unique nature of its relationship with the US that it had no land boundaries and that since the Korean War and until the early 1980s the East-West confrontation had primarily been focussed on Europe and in South East Asia. Therefore Japan, under the US “nuclear umbrella” was to a degree isolated from direct threat despite the proximity of the USSR. It therefore was able to follow policies, if not in isolation, then at least without the same degree of imperatives and complexities that countries such as the FRG found themselves facing. This situation affected public opinion and therefore had a direct impact on policy development or inaction depending on the view taken.

**Public Attitudes to Defence Issues in Japan**

Japan in the early 1980s still had security policy settings that had originally been formulated within the balance of power scenario of the 1950s. This plus a policy of non-involvement had led to defence issues being maintained to a marked degree without any large amount of public interest or participation. This lack of involvement led to many beliefs and attitudes being unquestioned for substantial periods and thus becoming entrenched in the public psyche. Thomas Risse-Kappen has argued that public opinion has an impact on foreign policy in three ways, through political institutions, the structures of society and the nature of coalition building within that society. The same factors could be said to impact on defence policy given the close linkages between the two and the impact security concerns have on foreign policy development. He argued that Japan as a relatively strong state, in the sense of a strong polity, has a relatively centralised political system, was homogeneous and had a corporatist system of coalition building (similar in many respects to his view of the FRG). He saw Japan as having a powerful bureaucracy however while foreign affairs dominated defence, it was in turn dominated by the economic ministries. He argues that Japanese societal belief in consensus leads to consistency and stability in policy settings. This in turn strengthens the hold these beliefs have on the public in general. While parliament is not seen as having a strong influence on policy development over security issues the LDP, as a result of its longevity, had some influence. In the case of Japan he argues development of defence policy has actually been constrained by public opinion.

While Risse-Kappen’s argument may be valid the fact is that for much of the period in question defence policy was not on the political agenda. Given the realities of the political system in Japan leadership from above in policy development, especially in an area as emotive as defence policy, is necessary to
initiate debate and maintain its momentum. This was not the case in the period in question. Nishihara states that defence issues were never raised by the Japanese Prime Minister in the Diet in any speech or comment before 1978. In addition, between 1954 and 1983 the Japanese Defence Agency had 34 directors and the agency itself did not have full ministerial status. Given the emphasis on security matters in general in the Cold War period this would probably be unique for any country. The fact that such issues as the one per cent limit on defence spending, the three principles of non-involvement in nuclear activities and limitations on defence exports became so entrenched, whilst evidence to support Risse-Kappens arguments on policy stability, could also as easily be argued were a result of defence policy being ignored for so long that rational political debate on these particular issues was no longer possible.

Conclusion

It can be seen therefore that for a 30 year period defence policy in Japan followed a minimalist course. The policy settings that were followed were the least possible to meet the requirements of the Japan-US Alliance and to provide for a minimum of self defence. This despite the fact that security issues were high on the international agenda and given the Cold War environment, Japan’s geo-strategic situation meant its greatest security threat, the Soviet Union, had forces 3.7 km from Hokkaido. In addition the security situation in North Asia, particularly the Korean Peninsula, while relatively stable post the Korean War, had a potentiality to become volatile at short notice throughout the period.

Japan had pursued its very low profile defence policy in a situation of quasi-isolationism. While a study of its economic policy would, I believe, display many of the characteristics of complex interdependence this is not the case in the area of defence. For many decades Japan has been able to follow a passive policy, ignoring its complex geo-strategic situation and growing regional importance by relying on the US-Japan Alliance and the legalities of its constitution to remain aloof from purely security related matters. This was exacerbated by the political sensitivities created by Japan's recent history, the realities of which its existing policy settings had allowed Japan to ignore rather, as would appear to be the case in the FRG, than address.

It is evident therefore that the development of defence policy in Japan was quite unique for the Cold War era. It is also probable that Japan’s ability to achieve security within a virtual policy vacuum can be related to the hiatus in 1991 over support to be offered to the Allies in the Gulf War.

Had defence and security issues been actively addressed throughout this period the processes would have been in place to respond to the political crisis. However due to the fact that circumstances had allowed Japan to largely ignore defence issues this was not the case. While the situation had shown some signs of change in the 1980s, that it still had not been resolved, much later, was highlighted by the Gulf War crisis. When inconsistency exists within Liberal Democracies between policy objectives and policy debate, between policy objectives and current capabilities and most importantly between policy objectives and public opinion the causes of such a situation have developed over decades, then in a time of real crisis policy conflict and inaction will inevitably result.

NOTES
4. Ibid.
8. Ibid, p. 23.
10. Ibid, p. 320.
Reviewed by Lieutenant Colonel R.E. Bradford

There are always a multitude of victims in any war whose story never gets told for a variety of reasons. Quite often information regarding their particular situation never comes to light or for a range of diplomatic or security reasons, the information is suppressed. In this book, Mitchell Bard tells the story of a number of victims the common feature of which is the fact that they were American Jews who were captured by the Germans in World War II. Bard suggests in the book that the reason their story was never told was due to bureaucratic bungling, ineptitude or just downright lack of concern by those in power.

The book covers the stories of two main groups, namely civilians who were trapped in Europe at the commencement of the War and also those servicemen who were taken Prisoners of War. Bard graphically if not somewhat sensationally describes life in the ghettos for the American citizens who were interned by the Germans. It also provides glimpses of their later treatment in prisons and concentration camps.

Horrific stories are also related about the US Jewish servicemen taken prisoner who were segregated from other prisoners and dispatched to concentration camps or became forced labourers on civilian work projects in Germany. Whilst the number involved were not great, the author, quite rightly in my opinion, expresses great concern at the lack of interest and subsequent inaction by the US Government as to the welfare of its citizens.

Bard suggests that he wrote this book in order that the stories of these victims could be told. He indicated that he was frustrated in his research by a lack of official documents as well as the difficulty of contacting the survivors after such an extended period of time.

The story is not as horrific or worrying when compared to the great deal of death, pain and suffering incurred by the Australian and British Prisoners of War at the hands of the Japanese on the Burma Thailand “Death Railway”, and the numbers involved were relatively few. The lack of numbers, however, does not diminish the deplorable treatment of these persons and the lack of resultant action and support by the US Government. In the second last chapter of the book, Bard highlights this lack of concern when he relates the story of the resultant War Trials of the perpetrators of the atrocities, who were by and large not made to pay for their crimes against humanity.

Despite the interesting story line and the similarity to Australian experiences in the same conflict, I did not fully enjoy the experience of reading the book. Whilst it tells a worthwhile story that needed to be told, it does so in an antagonistic fashion, demanding action that because of the passage of time will not be forthcoming or assist the victims. The book is most political in this regard which I found detracted from its value as an historical work.

ARROGANT ARMIES – GREAT MILITARY DISASTERS: by James M. Perry. Published by Jacaranda Wiley Ltd., P.O.Box 174 Sydney NSW 2113. RRP $49.95.  
Reviewed by Flight Lieutenant (Ret) H.S. Brennan RFDJP

It would appear that before too long someone would sit down and give the reading public in general and Service personnel in particular a, for what of a better term, textbook on how NOT to conduct warfare unless prepared to lose many thousands of soldiers, both professional and mercenary, in what amounts to utter neglect and very bad planning. This is what this book does as it covers wars commencing with the French and Indian War of 1754-63, and concluding with the Riffian Rebellion on Morocco 1921-26. The author concludes with a Chapter on the American Disaster in Somalia 1993.

In the eleven Chapters devoted to a different bungled attempt to obtain peace one is subjected to a detailed run down on just what went wrong and the futile attempts of the particular Generals who were supposedly in command of and subsequently responsible for the welfare of their men and the successful conclusion of the particular battle. It would appear that most of the senior Officers of the day in those times had very little practical knowledge of how to fight the Indians on the American Continent. From a study of several battles with Indian and even regular troops the Indians seeming to outmanouver the Americans on most occasions. The British situation was even worse as the senior members of the British
Army had not learnt their lesson during the Dardanelles campaign and, closer to home, the Malaysian battles during the 1939-45 War.

Reading through each campaign one wonders at the logistical problems connected with moving not just the fighting regiments and their ancillaries but taking into consideration the several thousand people involved. It must have been a nightmare to get the action moving and keep it running and the absence of any form of communication except for carrier pigeons and soldiers on horseback. In these times one tends to think of so many troops being airlifted from point A to point B in a matter of hours, complete with all necessary equipment, in those days try and imagine the turmoil trying to move not one but several thousand troops.

In conclusion may I say that this book would be a valuable addition to any library as reading each Chapter makes one think - did this really happen, in this day and age the useless wastage of human life makes one wonder, "have we learnt our lesson or not" with future protection of human life.


Reviewed by Major Darren Kerr

There have been over 50,000 books and pamphlets published on the American Civil War. No period of American history holds such a fascination for Americans, and even many Australians, as does the years 1861 to 1865. Yet for the millions of words which have been printed, very little that's authentic has been written on the significant role played by military intelligence during the Civil War. Potboilers revealing the supposed "true" exploits of men and women claiming to have spied for either side have abounded, but the credibility of these is open to doubt. And in any case, these books have concentrated on spying at the expense of the other sources of intelligence such as balloons and signals which were used during the war.

In light of this, The Secret War for the Union by Edwin C. Fishel is a significant work. It is the first authentic history of military intelligence in the Civil War. The genesis for the book came in 1959, at the National Archives in Washington, when Fishel found among the miscellaneous records of the Union Army of the Potomac the operational files of that army's Bureau of Military Information. From that start, Fishel sought references to Civil War intelligence from other sources such as the collected papers of Civil War General's such as McClellan and Hooker (who originated the Bureau of Military Information). The end product is a remarkable book which provides the definitive study of Civil War intelligence; at least from the Union perspective.

Fishel starts his work by demonstrating that "it would be difficult to imagine a nation entering war more unprepared to obtain information about its enemy than the United States of 1861." The US Army at this time had no intelligence staff, no concept for the use of intelligence and even lacked doctrine for the collection, processing and dissemination of intelligence. Not surprisingly, the outbreak of war in 1861 saw both sides woefully prepared for military intelligence operations.

The Secret War for the Union charts the development of Union military intelligence, identifying both its strengths and weaknesses. Fishel approaches his task in a chronological manner, limiting his examination to the campaigns which occurred in the eastern theatre from First Bull Run to Gettysburg. The concomitant development of the intelligence capability is traced from its virtual absence at Bull Run to high effectiveness at Gettysburg. The important role played by Hooker in setting up the Bureau of Military Information is discussed, as is the truth about the well-known detective Pinkerton (who emerged from the war with a tarnished reputation) and the impact, or the lack of impact, of his "all-trees-and-no forest" intelligence reports. As a counter-point, Fishel examines Confederate attempts at intelligence, however, the fact that no collection of records of Confederate intelligence operations has been uncovered means that the "Confederates' success and failures cannot be studied in the same detail."

It should come as no surprise that many of the difficulties faced in the collection and use of military intelligence during the Civil War are those which have been encountered in many wars since. In particular, the use or misuse of intelligence by commanders strikes a familiar chord. Hooker, of course, rates a special mention as one who appreciated the value of intelligence and invented the all-source approach to intelligence collection. Meade lacked Hooker's skill in organising an intelligence staff, nevertheless, he brought a flair for intelligence interpretation which Hooker lacked. Demonstrating the important role which the commander has in utilising the intelligence provided to him. McClellan on the other hand had neither Hooker's vision, nor Meade's analytical skill and demonstrated that even good intelligence does not insure sound decisions. At the battle of Antietam, McClellan obtained intelligence of rare quality - a copy of Lee's famous
“Lost Order” – which gave him the ability to destroy a large portion of Lee’s divided army. McClellan though, obsessed by the apparent authenticity of the order, ignored other intelligence reports of deviations from Lee’s order and so allowed Lee time to reassemble and fight a drawn battle. The lesson which is continually driven home by this book is that intelligence is not an end in itself, it must be used appropriately by the battlefield commander.

At over 500 pages this is a big book, nevertheless it is extremely readable. Fishel’s detailed research is evident and he brings an objective approach to his evaluation of intelligence operations. He provides extensive notes to support his work and these should prove a boon to others who wish to study the Civil War. As he has shown, after 50,000 books and pamphlets, there are still specific areas of research inadequately covered. Of particular interest, are his use of appendixes which cover areas such as a detailed listing of the successes and failures of Federal and Confederate Intelligence, a few lessons from (and about) Civil War Intelligence and discussion of the McClellan-Pinkerton estimates of Confederate numbers (a subject which has been a source of much contention amongst Civil War scholars).

Overall, this is an excellent book which should be essential reading for not only all intelligence officers but for all users and abusers of intelligence. The lessons Edwin Fishel draws from Civil War intelligence are still applicable today, which says a great deal about the inadequacy of our approach to military intelligence. Books such as this help provide lessons from the past through which we can build for the future. A valuable book indeed.