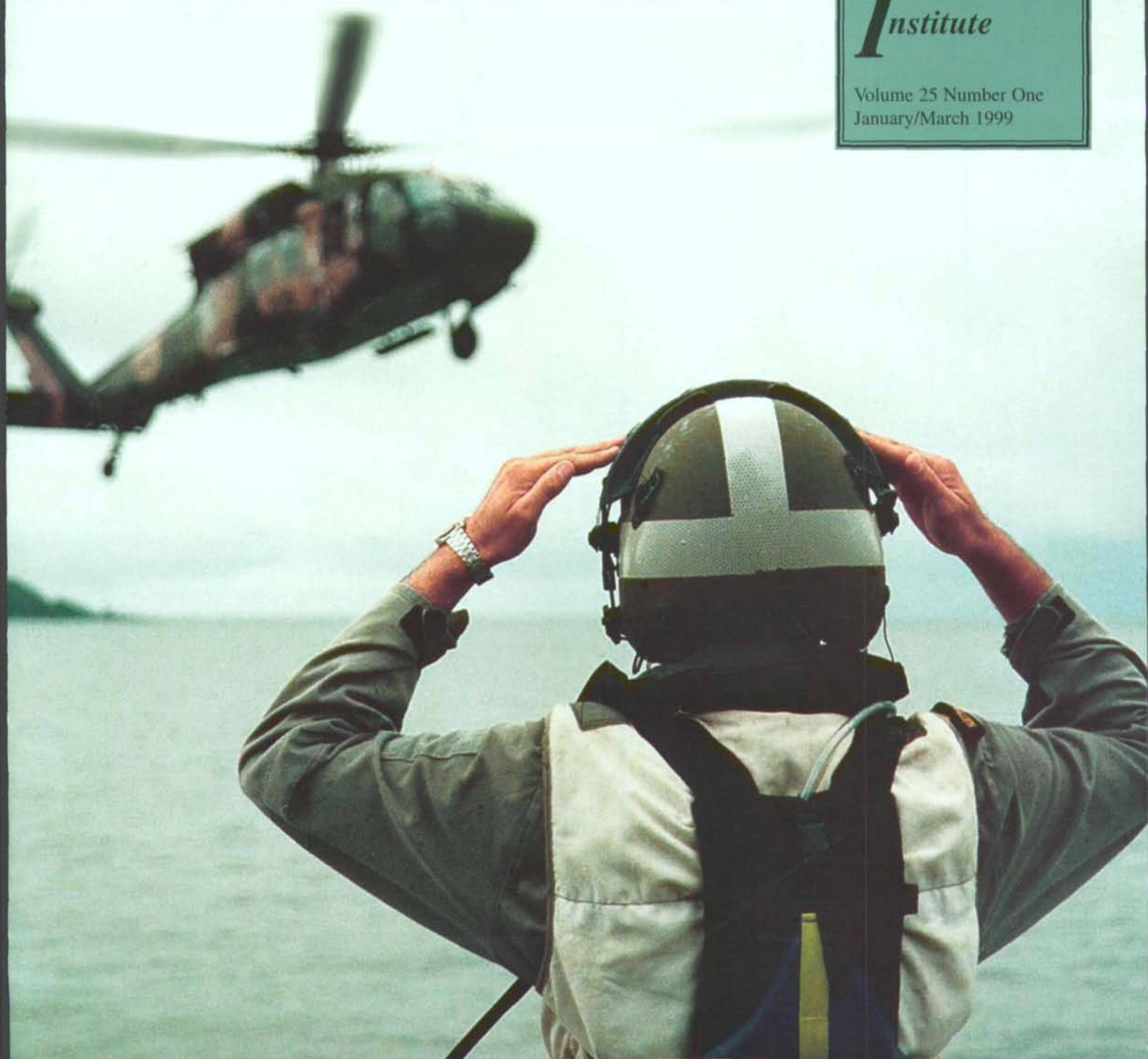




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AMPHIBIOUS WARFARE

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CONTENTS



Cover – Army Blackhawk Helicopters provided HMAS Tobruk and 2 RAR with air support for Exercise Initial Landing 99



Back Cover – HMAS Tobruk at anchor preparing to unload vehicles.

Apology

1. The author of "People... the last to be considered" in our last edition was CMDR Jackson RNZN, not CDRE McCaffrie as annotated.
2. Mr Bill Reeve's surname was incorrectly written as Reave.

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- 4 Editorial
- 5 Amphibious Operations Doctrine
– Commander A.K. Whittaker – RAN
- 8 Military Sea Lift – The role of HMNZS Charles Upham
– Commander Richard Jackson – RNZN
- 10 Unarmed Prophets: Amphibious Warfare in Australian Military Thought
– Michael Evans – Land Warfare Studies Centre
- 20 Breaking the Spears: HMAS TOBRUK'S Involvement in Truce Monitoring Operations in Bougainville
– Commander A.K. du Toit – RAN
- 24 A Navy Perspective of the Rise of Amphibious Capability
- 27 HMAS Protector and SMS Emden
– Commander Robin Pennock – RAN (Rtd)
- 30 The Battle of Yalu
– Graham Wilson
- 37 New Zealand's Defence Equipment Decisions
– Commander Richard Jackson – RNZN
- 39 President's Report – 1999 AGM
- 42 A Force for All Seasons
– Lieutenant Commander John Robinson RAN
- 49 Amphibious Warfare and the ADF
– Maritime Command
- 51 Book Review



Editorial

Amphibious Warfare

In the current political and social climate of our region it would not be beyond the realms of possibility that the ADF needs to provide force overseas. If that particular force required elements of Armour, Artillery and Aviation to support Infantry elements how would we get it there? If the Navy was tasked today, we have one asset that could provide the service. Would that be sufficient for even a low-level commitment?

Is the Navy adequately preparing for likely scenarios or are they preparing for "blue water" conflicts that would have been relevant twenty years ago? Are we pursuing a naval strategy at the expense of a maritime strategy? Are Navy strategists and planners paying lip service to a maritime strategy by maintaining a token sea lift capability? Clearly a much larger force is required to deploy (and land) the sort of land forces Australia might want to have available to give some meat to the bones of a maritime strategy. Are force structure planners driving strategy by maximising the level of the more "glamorous" surface combatant force at the expense of the amphibious workhorse?

This edition of the journal will give you an insight into Amphibious Warfare and its part in our maritime strategy. This aspect of warfare crosses service boundaries more directly than any other and as such stimulates some interesting discussion. There are a number of articles from both the Navy and Army sides of the house along with contributions from New Zealand.

The first article in the JANI's Amphibious Warfare edition is a useful setting piece by Commander Andy Whittaker, the Deputy Director Doctrine at the ADF Warfare Centre. If you have any doubts on what Amphibious Warfare actually is – this article will leave you in no doubt. The article sets the 'sheet of music' firmly on the music stand.

Doctor Michael Evans, the research Historian with the Land Warfare Study Centre, presents a historical development of amphibious capability in Australia.

Unarmed Prophets 'traces the historical outline of an alternate strand of military thought' – that of amphibious capability. This article is followed by one prepared by Commander W. Johnston that outlines the RAN perspective of the rise of amphibious warfare. The two articles read in parallel present an interesting balance of opinion that show Army and Navy are working well together in rejuvenating the ADF amphibious lift capability.

Lieutenant Commander John Robinson, RAN has provided an article that encourages the concept of a total ADF force capability. The common thoughts behind both Dr Evans' and LCDR Robinson's articles establishes the most up-to-date planning basis not only in the Navy, but also in the ADF.

Commander Richard Jackson from the New Zealand Navy has provided a kiwi perspective on the amphibious capability of the RNZN. Military Sea Lift uses the conversion of HMNZS CHARLES UPHAM to make comment on the NZDF amphibious policy.

Having spoken at length on doctrine and the development of an amphibious capability Commander du Toit details the involvement of HMAS TOBRUK in recent operations in Bougainville. This is a "been there" article that places into perspective the doctrine and development issues discussed in previous articles.

There is also an article on New Zealand equipment purchases provided by Commander Jackson and an historical section.

The April – June edition is currently under development and will deal with the relevance of surface ships in the modern battlefield. This theme is sure to promote some healthy discussion. Any articles on this topic or any other you would like to see in the Journal would be welcome.

ANDREW BEWICK



Amphibious Operations Doctrine

by Commander A.K. Whittaker, RAN

The term Amphibious Operations evokes in many people images of troops storming the beaches of Iwo Jima and Normandy "Saving Private Ryan" style. However, modern amphibious operations are far removed from the practices of the past and aim to manoeuvre forces in the littoral area from a seaward approach, avoiding the enemy's defences and the inherent attrition of a direct assault.

The Australian Defence Force has recently reviewed its amphibious operations doctrine to keep pace with international developments in amphibious warfare and to cater for the introduction of the two new Landing Platforms Amphibious, HMA Ships *Manoora* and *Kanimbla*.

An overview of the new doctrine follows in this article which summarises the content of the soon to be published Australian Defence Force Publication 12 – Amphibious Operations. Of note is the replacement of the term Amphibious Tactical Lodgement (ATL) with the term Amphibious Assault which includes the two categories 'assault on a potentially hostile shore' and 'assault on a hostile shore.' The term ATL was unique to the ADF and the adoption of the term Amphibious Assault brings the ADF into line with international doctrine and enhances the ADF's interoperability with its allies.

Introduction

The maritime environment provides commanders with significant scope to conduct manoeuvre warfare through the employment of amphibious operations. Amphibious operations are operations launched from the sea by a joint task force against a hostile or potentially hostile shore with the aim of rapidly and decisively concentrating combat power within the littoral battlespace. The boundary between sea and land is no longer a barrier as in the past, but rather an area in which an amphibious operation can be mounted by assaulting through a coastal focal point in an uninterrupted manoeuvre towards the objective.

Amphibious operations afford a broad range of options to apply military force and project power in support of operations ashore. Manoeuvre warfare, utilising amphibious operations, seeks to achieve results disproportionate to the resources applied by denigrating an enemy's effectiveness through a series of coordinated rapid, violent and unexpected actions. The object is to create a turbulent and fast deteriorating situation that overwhelms the enemy. Emphasis is placed on speed, mobility, deception and surprise to create confusion, uncertainty and delay in the enemy response.

Modern amphibious concepts

Contemporary defensive capabilities have rendered the World War II amphibious tactic of storming heavily defended beaches unlikely to succeed without unreasonable cost. Amphibious operations should therefore be focused where adversaries' defences are weakest, or indeed, non-existent. They should be conducted at a time and place that will enable the maximum build-up and application of combat power before the enemy has time to react.

The amphibious task force has significant inherent advantages. It has operational mobility and can poise at sea. Its flexibility in ship to shore manoeuvre can disguise the intended location of landing and produce diversions and deceptions. This creates uncertainty in the enemy and can lead to the incorrect positioning of defensive forces. Amphibious operations would often be supported by, or in conjunction with, airborne operations which can exacerbate the enemy's uncertainty.

Amphibious operations are executed in breadth and depth utilising parachute and helicopter-borne troops on the enemy's flank and rear, and seaborne delivery of land forces by landing craft. An amphibious operation is unlikely to occur in isolation. Comprehensive shaping of the intended theatre is achieved through the application of pre-assault forces to reduce the risk to own troops and enable them to move quickly from disembarkation points to the objective area. Objectives could be many miles from the shore.

Amphibious forces have a significantly enhanced ability to conduct military support operations. Seabasing obviates the requirement to establish facilities ashore prior to conducting activities such as relief or evacuation operations. Improvements in ship-to-objective mobility enables direct military assistance to be provided to remote areas.

Definitions and Characteristics

The following details the types of amphibious operations that may be conducted.

- **Amphibious assault on a potentially hostile shore.** The amphibious force will aim to land on undefended areas, however, such operations will be mounted against the contingency that the enemy will react before completion of the operation.



- **Amphibious assault on a hostile shore.** The amphibious force will aim to attack a weak point in the enemy's defences where the defences cover all potential landing sites. The assault will avoid landing under fire but exploit mobility to attack from an unexpected direction.
- **Amphibious raid.** A landing from the sea on a hostile shore involving swift incursion into, or a temporary occupancy of, an objective, followed by a planned withdrawal. Raids are conducted for such purposes as:
 - inflicting loss or damage,
 - securing information,
 - creating a diversion, and
 - capturing or evacuating individuals and/or materiel.
- **Amphibious demonstration.** This is an operation conducted for the purpose of deceiving the enemy by a show of force with the expectation of deluding the enemy into a course of action unfavourable to him.
- **Amphibious withdrawal.** This is the withdrawal of forces by sea in naval ships or craft, and/or by air in helicopters, from a hostile or potentially hostile shore.

Combat operations that involve waterborne movement, such as administrative disembarkation on friendly territory, water terminal and logistics over-the-shore operations, possess certain characteristics and employ some of the techniques of an amphibious operation. However, by definition these are not amphibious operations.

Military Support Operations

Amphibious operations are not limited to periods of conflict and may be employed across the operational continuum. Amphibious operations may be conducted as part of military support operations that can include:

- defence assistance to the civil community,
- defence force aid to the civil power,
- peace operations,
- humanitarian operations,
- civil enforcement duties, and
- evacuation operations.

Landing Force Constraints & Relative Strength

The nature of operations ashore will be constrained by the limitations on the Theatre Commander, the capability of the Joint Task Force Commander and the

capacity of the Commander Amphibious Task Force to deliver military force. This limitation will dictate the size of the landing force and the nature of its equipment that may in turn limit its firepower, mobility and sustainability.

In order to achieve success, an amphibious force should have at least local sea control over enemy surface and submarine forces, local air superiority, and significant advantage of combat power over the enemy forces in the objective area for the duration of the operation. However, where there are compelling operational imperatives, an amphibious operation may be undertaken on the basis of an overall superiority of force in the amphibious area of operations. An amphibious task force may not possess numerical superiority in landing forces against an enemy, but may still be able to conduct an assault successfully by using surface and air superiority to neutralise enemy land forces.

In addition to maximising local superiority of forces within the objective area, an amphibious task force should have reasonable assurance of freedom from effective interference by enemy surface, subsurface, air or ground forces from outside the objective area.

Sequence of an amphibious operation

Phases

The sequence of amphibious operations is well defined and the successive phases bear the title of the dominant activity taking place within the period covered. The sequence of phases are:

Planning. Planning occurs throughout the entire operation but is dominant in the period prior to embarkation.

Embarkation. The embarkation phase is the period during which the forces concentrate with their equipment and supplies and embark in assigned shipping.

Rehearsal. The rehearsal phase is the period during which the operation is rehearsed for:

- testing the adequacy of plans, the timing of detailed operations, and the combat readiness of participating forces;
- ensuring that all echelons are familiar with plans; and
- testing communications.

Movement. The movement phase is the period during which the components of the amphibious task force move from the points of embarkation, or from a forward deployed position, to the objective area. This move may be via rehearsal, staging and/or rendezvous areas. The movement phase is completed when the components of the amphibious task force arrive in their assigned positions in the objective area.



Pre-assault operations. Pre-assault operations are those theatre operations conducted prior to the amphibious assault and include:

- **Shaping operations.** Shaping operations are designed to seize the initiative, gain battlespace dominance in the littoral and create a fundamental dilemma for the enemy commander as to the likely place and time of the landing. Shaping operations are conducted in support of the overall amphibious objective under theatre level direction and command. They will commence prior to the arrival of an amphibious force in area and will usually continue in support during, and possibly following, the amphibious assault. Shaping operations include deception plans and strikes against targets within and outside the amphibious operations area to neutralise enemy forces.
- **Advance force operations.** Advance force operations are conducted prior to the establishment of an amphibious operations area and are related to subsequent activities within it. Advanced force operations may precede the amphibious operation by many days and are generally covert in nature. A fundamental requirement of this type of operation is that it does not compromise the intended place and time of landing. The types of operations involved include intelligence and target acquisition.
- **Pre-landing operations.** Pre-landing operations are conducted separate to pre-assault on establishing an amphibious operations area. They are conducted up to two days before the assault by forces organic to the Amphibious Task Force. They are primarily designed to support and minimise risk to the main landing force. They are designed to:
 - minimise risk to the landing by inserting agencies capable of synchronising movement and firepower;
 - gather localised tactical intelligence that may influence the execution of the landing plan;
 - isolate the landing area; and
 - clear routes and obstacles.

Assault. This phase is the period between the arrival of the major forces of the amphibious task force in the objective area and the accomplishment/termination of the mission. Development of the area for its post operational use may be initiated during this period.

Termination of an Amphibious Operation

The termination of an amphibious operation is predicated on the accomplishment of the mission of the amphibious task force. This will be in accordance with the specific conditions contained in the governing instructions.

The landing force is regarded as firmly established ashore when, in the opinion of the landing force commander:

- The force beachhead has been secured.
- Sufficient tactical and supporting forces have been established ashore to ensure the continuous landing of troops and material required for subsequent operations.
- Command, communications, and supporting arms coordination facilities have been established ashore.
- The landing force commander has stated that he is ready to assume full responsibility for subsequent operations.

Conclusion

The ADF's amphibious operations doctrine has been reviewed to cater for the introduction into service of the new LPAs and to enhance the ADF's interoperability with its allies. The doctrine addresses Amphibious Assault rather than Amphibious Tactical Lodgement, albeit the ADF's amphibious lift capability remains modest by international standards. It would not be expected that the capability be utilised 'against a hostile shore' unless part of a combined operation with our allies, or directed against very light opposition. The enhancement of the doctrine to include Amphibious Assault reflects the reality that amphibious landings in all but an administrative context are planned against the possibility of opposition. It would be imprudent to do otherwise.

Amphibious operations are the most complex of all military operations and their execution involves the employment of all three services. The ability to land men and material by air as well as by sea is essential to the effective application of force and flexibility of the operation. Accordingly, organic air assets will play a vital role in the conduct of any amphibious operation.

Amphibious operations demand the highest level of command, control and communications. History has shown that success is unlikely where these elements are inadequate. The forces involved in an amphibious assault may cover a significant part of the ADF. Air power may be used in the air transport and offensive support roles as well as in pre-assault operations. Pre-assault operations may also involve submarines in clandestine operations and MCMVs in clearing the approaches to the beaches. The Navy will also be employed in the transportation of troops to the landing area and subsequent Naval Gunfire Support. Accordingly, the planning of an amphibious operation must be comprehensive and exercise truly joint operations in order to achieve a successful and effective culmination.



Military Sea Lift

The role of HMNZS Charles Upham
Commander Richard Jackson

The military sea-lift ship, HMNZS *Charles Upham*, has been accorded a high priority for conversion in New Zealand's recent Defence spending decisions. But this welcome decision comes at the cost of much controversy and, sadly, at the expense of the Naval Staff's reputation.

A military sea-lift ship had been identified as relevant to New Zealand as far back as the 1987 Defence Review. In 1991 the need was confirmed, and with the 1994 Defence Assessment, the provision of a sea-lift capability was made a high priority, and – importantly – funds were allocated. Within weeks of Cabinet's approval, the RNZN purchased the *Mercandian Queen II*, a Danish roll on/roll off freighter, which was in service in northern Europe.

The purchase was made quickly, because extensive study had gone into the problem. The RNZN had looked a purpose designed ship, essentially a mini-LPD, but it would have cost some \$250 million (back when \$300 million could buy a brand new frigate). Then merchant ships like the *Union Rotoiti* were assessed, indeed closely examined. These 18,000 ton Ro/Ro ships had sufficient vehicle capacity for all the Army could desire, and were big enough to carry a large flight deck, with at least four spots. But the actual ships had some significant maintenance and conversion problems, while the psychological factor of such a large ship being used among our friendly Pacific neighbours weighed heavily on some senior officials. So further research led to the *Mercandian* class being studied, and eventually the purchase was made.

The *Mercandian Queen II* was delivered to NZ in February/March 1995, and already one aspect of the ship's characteristics was made vividly apparent: carrying a light commercial cargo the ship crossed the Indian Ocean on her way to NZ and encountered a cyclone. The ship rolled heavily and quickly, including a roll of over 30 degrees – a frightening incident. This trait is, of course, well known among Ro/Ro operators – they generally sail fully laden, and when loading ensure the top vehicle deck is tightly packed. The intent is to reduce the rate of roll by reducing metacentric height – the equivalent of moving the bob further up the arm of a metronome, so as to slow the rate of the pendulum swing. In fact when the British RFA *Argus* was converted from the STUFT ship '*Contender Bezant*', some 800 tonnes of concrete was poured on the upper deck to form the foundation of the flight deck, while serving to slow the ship's roll to allow helicopter operations.

In October 1995 the ship was formally commissioned into the RNZN as HMNZS *Charles Upham*, named for New Zealand's most famous soldier, the Second World War double VC winner. By then the *Upham* had been painted grey, given a limited amount of specialist naval communications equipment and the ship's company trained in its safety and operating features. As well, sixteen containers of shingle (some 300 tonnes) were loaded on to the upper deck to improve the rolling characteristics.

Then during 1996 the ship began a 'limited operations and evaluation' period, intended as a trial opportunity for the Army. Initially the sea-lift ship took Army equipment from the South Island to an exercise in the North Island, using commercial ports. Later, after various loading trials with a range of Army vehicles, the ship was loaded for an Army exercise in Fiji and Tonga. It was during this deployment that she went through very heavy seas, whereupon she also suffered an engine failure. Being lightly loaded, the ship rolled rapidly and heavily, the worst roll reaching 37 degrees. Not only was this frightening for the ship's company, but such extreme rolling meant that cargo lashings were in danger of failing.

Coincident with these experiences in *Charles Upham*, the RNZN was experiencing severe personnel shortages in its technical branches, so it became convenient to lay up the new sea-lift ship, pending the funding and design of the necessary modifications, while also reducing the demand for marine engineers. Thus *Charles Upham* became known as the floating car-park, or the 'Calliope South windbreak'. Subsequently she has been leased for two years to a Spanish shipping company and in late 1998 was delivered to Spain for commercial use.

I have remarked previously (see JANI July/Sept 98) on the controversy that was generated about the ship; the ulterior motive appeared to be to discredit the Naval Staff. Since then the Auditor General and Treasury have both investigated the purchase and offered opinions to government. Inevitably the bean-counters' attitude was that the ship was better sold – another example of the short term vision induced by focussing only on the bottom line.

So, last November, the Minister of Defence issued a strongly worded statement that rebutted the allegations made against the Naval Staff and emphasised that *Charles Upham* is the right ship for New Zealand's sea-lift needs. Then the December '98 Defence review gave a clear priority for the

conversion of the ship, so that after 2001 the RNZN should be operating a well equipped military sea lift ship.

What then should be the doctrine underpinning the operations of the new ship?

The ship's role is intended to be sea-lift, ie landing military vehicles via her roll on/roll off ramps at a functional port. As well, disaster relief, medical assistance and stores carrying, can all be carried out by the ship. But in view of the formation of the Australian Amphibious Squadron, it seems to me that *Charles Upham's* military role could be better developed by frequent exercises with the AAS. The reality is that in disasters or military operations, a functional port in the right place is a rare experience, hence *Charles Upham* should be tested in across-the-beach operations. This means that the ship's prime assets will become her flight deck and embarked helicopters.

The plan is that the converted ship will have a hanger and flight deck, with the flight deck large enough to land on Chinooks. But in all likelihood it will be RAN Sea Kings or Australian Army Blackhawks that will be the most appropriate aircraft to operate from *Charles Upham*. Therefore the RNZN will have to make *Upham* available for operations with the RAN

and 5th Aviation Regiment, so that her flight deck crews and cargo handling teams can remain worked up in air operations.

Similarly, the NZ Army will have to think carefully about the loads they embark in the ship – rather than lines of APCs and heavy trucks, the stores embarked should all be suitable for helicopter-lift; ie Landrovers and 105mm Light guns, for example. I see the ship operating primarily as a mini-LPH, with most equipment disembarked via helicopter, and the vehicle ramps remaining firmly closed while on operations.

However, the doctrine has yet to be developed; no doubt the RNZN and NZ Army will take a close interest in the activities of Australia's Amphibious Squadron. Yet our experience so far with the *Charles Upham* is discouraging – the RNZN at times seemed faint-hearted towards the value of the new ship, while the Army apparently did not appreciate the actual purpose of the military conversion. The upshot is a three year delay in getting the (converted) ship into service, and an initial operating concept that seems inherently limiting. But if the ship does become a regular part of the Australian Amphibious Squadron and the emphasis is placed on her helicopter capability, then the *Charles Upham* could become a valuable asset to both the ADF and NZDF.



Soldiers from Alpha and Charlie Companys, 2 RAR board Seaking Helicopter to return onboard HMAS Tobruk after night beach assault. Exercise initial landing 99.



Unarmed Prophets: Amphibious Warfare in Australian Military Thought

by Michael Evans

Land Warfare Studies Centre.

In March 1977, the defence analyst, B. N. Primrose argued that one of the intellectual weaknesses in Australia's perception of strategy was the absence of a maritime tradition. He wrote, 'as an island trading people, Australians lack a real understanding of the utility of the sea: They lack significant interest in maritime affairs; have little cultural affinity with the sea... and it is doubtful if many leaders or the electorate behind them have understood how to exploit or control the maritime resources which the nation possesses'.¹ A decade later, the then Minister for Defence, Kim Beazley, made a similar observation. In a speech in November 1987 he lamented, 'despite a host of good reasons for the contrary, Australia is not a maritime nation and its people do not sustain much of an interest in Australian maritime strategy'.²

More than another ten years on, Australian defence planners have embraced, in principle, a maritime concept of strategy. But they have yet to demonstrate an understanding that such a strategy represents a joint rather than a naval-air approach to military planning. Indeed, Australian defence planners have displayed a rather tenuous grasp of the work of the doyen of maritime strategists, Sir Julian Corbett. In 1911 Corbett warned against equating maritime strategy with naval strategy. 'The paramount concern... of maritime strategy', he wrote, 'is to determine the mutual relations of your army and navy in a plan of war'.³ In the formulation of maritime strategy, there were 'delicate interactions' between land and sea forces (one must now, of course, add air forces to Corbett's equation) which required careful handling by military planners.⁴

The weakness of Australia's maritime strategic tradition is well exemplified by the neglect of amphibious warfare doctrine. It has been argued that amphibious flexibility is the most important strategic asset that a maritime state possesses.⁵ Yet since the end of the Second World War, the Australian Army has tended to concentrate on continental-style operations while the Royal Australian Navy (RAN) and the RAAF (Royal Australian Air Force) have gradually developed an interpretation of maritime strategy which is confined mainly to Mahanian-style notions of naval sea control and the air defence of the maritime approaches. The result of these trends is, that at the end of the twentieth century, contemporary Australian strategic thought is divided between

contending notions of continentalism and navalism.⁶ Such an approach flies in the face of Corbett, who believed that only a united military effort could constitute maritime strategy. He wrote:

*...By maritime strategy we mean the principles which govern a war in which the sea is a substantial factor. Naval strategy is but that part of it which determines the movements of the fleet when maritime strategy has determined what part the fleet must play in relation to the action of the land forces; for it scarcely needs saying that is almost impossible that a war can be decided by naval action alone...'*⁷

Similarly, separate continental land operations were inadequate in serving the needs of a maritime strategy. As Corbett observed, 'the crude maxims as to primary objects which seem to have served well enough in continental warfare have never worked so clearly where the sea enters seriously into a war'.⁸

An Australian maritime strategy, embracing the principles of Corbett and employing the resources of all three services, remains to be formulated. Yet in both the forward defence era of the 1950s and 1960s and in the Defence of Australia era between 1972 and 1997, there were always dissenting voices who argued for a joint maritime strategy employing an amphibious capability to maximise seaborne mobility. Since most of the features of amphibious warfare are highly relevant to the development of a joint maritime strategy, it is worth examining the writings of the most significant of these dissenters – most of whom were middle-ranking Army and Navy officers writing in professional military journals. The aim of this article is to try to trace the historical outlines of an alternate strand of Australian military thought – one which over the past half century has had little official support – but a strand which, in the changing circumstances of post-Cold War international security, has much to teach current ADF planners engaged in addressing the problems of littoral manoeuvre.

Australian Amphibious Thought from the South West Pacific Theatre to the Pentropic Experiment

Australia has seldom concerned itself with the acquisition of amphibious capabilities except in a



national emergency – as was the case during the two world wars. In September 1914, a battalion-sized Australian Naval and Military Expeditionary Force (ANMEF) captured Rabaul and Madang and seized Germany's possessions in New Guinea following an amphibious landing at Kabakaul Bay. Naval elements of the ANMEF were later involved in ship-to-shore movement of British troops at Gallipoli. They also supported Australian troops at Suez and El Arish during the 1917-18 Palestine campaign.⁹

An Australian amphibious capability was not maintained in the inter-war years largely because of lack of resources and reliance on the Royal Navy. In the Second World War, when Australia was forced to confront the Japanese in the northern island archipelago from Sumatra to the Solomons, the armed forces were thrust into amphibious crisis-management. In 1942, a Combined Operations Training Centre was created in Port Stephens and an Army amphibious school was organised at Toorbul in Queensland. By the beginning of 1944, an Australian Combined Operations Section was formed to direct the amphibious activities in 1944-45 of the 7th and 9th Divisions of the 2nd AIF which undertook the Borneo and New Guinea landings at Salamaua, Lae, Buna, Tarakan, Wewak, Labuan, Brunei and Balikpapan.¹⁰ In general terms, these operations gave Australian forces a practical understanding of amphibious operations at the tactical level as well as providing some exposure to joint planning and command with Admiral Barbey's United States 7th Fleet Amphibious Force.¹¹ But outside the official histories, little scholarly research has been undertaken into the development of Australian expertise in amphibious operations during the world wars.¹²

After 1945, although the RAN decided to maintain a landing ship tank (LST) force – designated the 10th LST Flotilla – made up of six vessels, amphibious training rapidly declined in importance.¹³ In the 1950s and 1960s, Australia entered the forward defence era of expeditionary warfare in Asia employing single service rather than a joint approach to operations. RAN amphibious ships became important mainly in transport operations as did the landing craft mechanised (LCMs) of the Army's Water Transport Squadron. But by the time of the Korean War in 1950, only two specialist amphibious units were retained in the Citizen Military Force (CMF), an Artillery Amphibious Observation Battery and an Armoured Corps Amphibious Assault Regiment.¹⁴ In the event of amphibious operations in Asia, Australia seemed content to rely upon the resources of its allies. During counter-insurgency operations in Malaya and Borneo, Australia could count on the Royal Navy's Singapore-based Fleet Amphibious Force composed of Wessex helicopters and Royal Marine Commandos. During the Vietnam War, Australian forces knew that two US Navy Amphibious Ready Groups with battalion sized landing forces and air support were deployed in the South China Sea.¹⁵

Given this situation, it is perhaps not surprising that in the late 1950s and throughout much of the 1960s, Australian forces concentrated on operating in an allied framework. The RAN increasingly turned away from fleet carrier operations towards anti-submarine warfare; the RAAF began to forge a strong professional association with the United States Air Force (USAF) symbolised by the purchase of the F-111 fighter bomber strike force in 1963.¹⁶ In November 1959, the Army attempted to increase its combat power in South-East Asia by modernising its force structure through the pentropic organisation – a scheme derived from United States Army pentomic battle group doctrine.¹⁷

None of these measures favoured amphibious capabilities. Indeed, at the time of the Australian Army's adoption of the pentropic organisation in early 1960, an interesting essay on amphibious requirements appeared in the *Australian Army Journal*. It was written by Major D. M. Butler of the Royal Australian Infantry (RAR) and sought to address the best way for Australia to organise her regular forces to support her treaty obligations.¹⁸ Butler argued for a force based on high readiness for both independent and allied operations and capable of both limited war and internal security duties in South-East Asia for up to 5,000 miles from Australian soil.¹⁹

While favouring deployability by air, Butler thought that Australia lacked sufficient air transport, good airfields and accessible staging bases to move its forces around with any degree of confidence. He wrote, 'our forces must therefore be transported by sea, and since ports are not likely to be available, the forces must be capable of operating over open beaches'.²⁰ Butler noted that 'the only other force in the world with a similar problem to ours is the United States Marine Corps'.²¹ This led him to examine the concept of the US Fleet Marine Force division and the growing use of helicopter-borne operations to increase tactical mobility and rapid deployment. Butler thought that an Australian amphibious force designed along the lines of a Fleet Marine Force concept offered a number of advantages. First, its joint requirements would guarantee the national identity of an Australian task force; second, a fleet marine concept provided self-contained forces capable of independent action so reducing 'the danger of a burdensome dependence on our allies'; third, an Australian fleet marine force would be flexible in meeting threats ranging from limited war to internal unrest.²²

Butler advocated a three year plan, costing thirty million pounds, to convert one of the RAN's fixed wing aircraft carriers into a helicopter platform and to phase in new assault shipping.²³ He suggested creating an integrated Australian amphibious task force with a Joint Headquarters commanded by a Rear or Vice-Admiral. This task force would be composed of a



helicopter carrier, a brigade group (with an SAS company attached) and sufficient helicopter lift to carry and maintain a battalion group. Air support would be the task of an RAAF fighter wing capable of operating off Allied carriers and from forward air bases supported by transport, bomber and reconnaissance aircraft.²⁴ Butler concluded, 'integration of the Services is not necessary, but integration of their roles is the cornerstone of the whole effort if there is to be a true force in readiness'.²⁵

Amphibious Thinking in the Defence of Australia Era

Although Butler's recommendations were ignored by Australian defence planners, his essay raised themes which were to appear repeatedly in Australian amphibious writings over the next three decades. This was especially the case after Australia's withdrawal from Vietnam in the early 1970s and its movement towards the strategic posture of Defence of Australia.



Members of the ship's army detachment recover UNIMOG from LCM8 during exercise initial landing 99

In 1974, some of Butler's views were echoed by Lieutenant Colonel L. D. Johnson, Commanding Officer of 2/4 RAR and a graduate of the US Marine Corps Command and Staff College at Quantico.²⁶ Johnson pointed out that Australia required amphibious forces for reasons of both continental and archipelagic geography. While conceding that Australia possessed a weak national amphibious tradition, Johnson argued that the campaign in the South West Pacific in the Second World War had taught the nation a major lesson: when threatened from the northern island chain from Java to Fiji, Australia would require joint amphibious forces to successfully defend itself.²⁷

Referring to the shift in Army thinking towards continental defence in the wake of the end of the Vietnam War, Johnson thought that Australia's distances were so great 'that even a Caesar or Napoleon would baulk before contemplating the

movement of a large land army over them'.²⁸ Like Butler, he believed that the airlift of sufficient forces was not a practical option. There were problems in protecting air convoys and with the geographical location of developed air bases. Australia's best offensive air bases were in south-east Australia at Amberley and Williamstown and their infrastructures could not be duplicated quickly elsewhere in the north. As he put it, 'the startling fact is that these airfields are located in the wrong places'.²⁹ The development of 'bare bases' at Tindall and Learmonth was an initiative that was too dependent on finite air resources. In a military crisis, the RAAF would be too committed to gaining air superiority and supporting air bases to have the assets to support ground operations or undertake large tactical airlifts.³⁰

In the event of an enemy force seizing the northern islands, Australia's long distances to the littoral by rail and air were too restrictive for effective deployment of ground forces. Johnson observed, 'movement over long distances by road or rail limits flexibility of deployment, restricts the axis to narrow routes of advance near the littoral and place the ground forces in jeopardy'.³¹ Added dangers from choke points developing, as well as the demands of maintaining military forces over long distances and hazardous routes, would be as destructive to operational efficiency as enemy action. Johnson wrote, 'a land-based, land-trained army will be unable to deploy quickly enough along the inadequate communications inside "Fortress Australia" to fill all the needs of defence of the mainland, and certainly cannot cope adequately with the special techniques required for operations along the island chain or the island territories'.

Australia required a defence force with a capability for coping with the country's special geographical problems, a force that was structured around amphibious organisation, mobility and readiness. Such a seaborne force would have the advantage of being self-contained in combat fire support and could use 'on station' sea mobile air and logistic support.³² Johnson pointed out:

...The greatest advantage [of an Australian amphibious force] is that no land base of any kind is needed forward... Logistical and service support are provided by the 'sea base' concept... Overall, the amphibious force is a self-contained package, which can move freely and rapidly, bypass choke points, land assault infantry on ground of its own choosing, provide inboard fire support, launch its own intercept and close support aircraft, and maintain the landing force from the sea base in such a way that the only thing put on the beach will be the track marks of the assault vehicles... When the operation is terminated, it can extract easily without being involved in messy withdrawals over large distances by land...'³³

For both operational and financial reasons, Johnson considered that Australia should structure an amphibious force around an brigade of 5,390 combat and combat support personnel. This force included three infantry battalions, an artillery regiment an armoured regiment, an SAS squadron and two RAAF helicopter squadrons.³⁴ He proposed that a battalion group of 1,345 personnel be kept permanently afloat, supported by brigade elements ashore.³⁵ He argued that the RAN's force structure was adequate to project a battalion group using the aircraft carrier HMAS *Melbourne*, supported by guided missile destroyers and minesweepers.³⁶

Lieutenant Colonel Johnson estimated the cost of new equipment to be some \$282 million. This sum included \$40m for a vertical and/or short take-off and landing (V/STOL) squadron of Harrier AV8 aircraft; \$3.9 million for an armoured amphibious carrier squadron of 30 vehicles; and expenditure on a new amphibious assault ship (LHA) along with acquisition of a modified through-deck cruiser to carry V/STOL and Sea King helicopters in a carrier support role.³⁷ Like Butler, Johnson suggested phasing the new equipment in over several defence budgets. An Australian amphibious force as the main combat organisation of the ADF would force the services to 'concentrate their particular skills into one field of endeavour. He concluded, 'if cost effectiveness could be measured accurately, then the sum of the individual services pursuing their own courses would not be as great as that of a joint amphibious force'.³⁸

From 1975 until the emergence of the 1987 White Paper, the leading advocate of amphibious warfare in the ADF was Commander P. J. M. Shevlin, the Navy's Director of Joint Warfare between 1969 and 1981. Shevlin published a series of articles in the *Navy Quarterly*, the *Defence Force Journal*, the *Journal of the Australian Naval Institute* and the *Pacific Defence Reporter* calling for Australia to develop a credible amphibious capability which he believed was 'an essential element of national power'.³⁹

Shevlin had impressive credentials. He had served in the Royal Navy between 1943 and 1969 and was a veteran of four amphibious operations in Europe and the Far East during the Second World War. He participated in five more landings in the Middle East spanning a twenty year period from the late 1940s to the mid-1960s. These landings included operations during the Anglo-French Suez campaign, the British defence of Kuwait against Iraq and in the British counter-insurgency campaign in South Arabia.⁴⁰

While Shevlin's writings followed Butler's and Johnson's line of reasoning, they brought to bear a technical expert's perspective on Australia's amphibious requirements. It was no accident that, in the early 1970s, he was project director for the new amphibious heavy lift (LSH) ship HMAS *Tobruk*, the

first purpose built amphibious vessel to be procured for the RAN. In the mid-1970s, *Tobruk* an over-the-beach roll-on-roll off ship, replaced the aircraft carrier, HMAS *Sydney*, which had performed ad hoc amphibious duties – including an LPA role – during the 1960s and early 1970s.⁴¹ Shevlin was also a firm supporter of the RAN's First Australian Landing Craft Squadron of 1974-75 and its successor, the Australian Amphibious Squadron, which was raised in 1981 and lasted until 1986.⁴²

Through his writings Shevlin became perhaps the ADF's strongest proponent of amphibious warfare. For over a decade, he urged the Army to view the sea as a tactical area of operations by taking advantage of HMAS *Tobruk*'s capabilities in the lodgement of cavalry, special forces and the deployment of armour and artillery.⁴³ He was an advocate of the formation of an amphibious core force based on *Tobruk*, the landing craft heavy (LCH) of the Australian Landing Craft Squadron and a special landing group of trained troops. To this end, he recommended that every two years one of the Army's task forces should be nominated to provide a quick reaction Amphibious Landing Group (ALG) of two infantry companies, a support company and a beach team.⁴⁴ This measure, he argued, would diversify Army training beyond continental land operations and introduce 'a marine element' that was as essential to a maritime defence force as mine warfare or surface strike forces.⁴⁵ But to Shevlin's great disappointment, the Army demonstrated only a 'continuing uncertainty' over the tactical use of the sea and failed to develop a concept of amphibious operations.⁴⁶

Like Butler and Johnson, Shevlin believed that the Army's role should be essentially that of an offshore regional force. He pointed to the important use Britain had made of land forces against strategic targets along the coasts of Europe and North Africa during the Second World War. The early capture of strategic islands, he argued, had been the essential precondition to later Allied successes in the Mediterranean, Indian Ocean, South East Asian and South West Pacific campaigns.⁴⁷ In his writings, Shevlin drew in particular, on Britain's parallel experience as a maritime state to stress the importance of joint operations through what he styled as Australia's 'sea water moat' to the north.⁴⁸ A joint strategy was not simply a question of dealing with a threat to continental Australia, but was also a means of defending vital Australian interests further afield. He noted:

...Australia, like Great Britain in the two World Wars, could be brought to her knees by an effective maritime blockade... The outcome of a Battle of the Indian Ocean could be as decisive to Australia as was the Battle of the Atlantic fought between the German U-boat arm and Luftwaffe on the one hand and the allied navies and air forces on the



other, with the support of Army and Marine units to ensure the capture/retention of every strategic island covering the convoy routes...⁴⁹

Shevlin clearly disliked the implications of the emerging doctrine of Defence of Australia during the 1970s and 1980s. He never wavered in his view that the most serious threat to Australian security lay in the northern island archipelago stretching from Sumatra to the Solomons.⁵⁰ The ADF had to possess a capacity to project power inland which went beyond short duration air strike. 'In the days of advanced VSTOL aircraft', he observed, 'it would be intolerable for Lord Howe Island airstrip to be in enemy hands; a pair of dividers will indicate a number of other islands in Australia's vicinity which could not be allowed to be developed as an aggressor's advanced bases'.⁵¹

Credible national defence demanded that the Australian Defence Force should possess the capability to deny to any enemy the islands to the north 'by means of reinforcement, recapture, seizure or neutralisation'.⁵² An offshore capability for the Army and the Navy was 'of greater priority than training for land battles in Australia itself though these must, of course, also be in the essential training program, to defeat that which maritime operations may have failed to stop'.⁵³ Referring to the role of the Army he wrote:

...The Army's best contribution to national defence would be in supporting RAN and RAAF efforts to hold the enemy as far back from Australia's shores as is practicable. This can best be achieved by being able to reinforce, recapture or seize strategic islands, or to strike swiftly at strategic targets, with trained landing forces carried in the RAN's amphibious ships and/or RAAF transport aircraft...⁵⁴

But like Butler and Johnson, Shevlin was a voice in the wilderness. Although the Army belatedly agreed to form the Australian Amphibious Squadron in 1981 in Brisbane – based on HMAS *Tobruk* and adjacent to the 6th Brigade – Army doctrine steadily increased its emphasis on the Defence of Australia and continental land operations.⁵⁵ In 1982 HMAS *Melbourne*, the Navy's last carrier was decommissioned, effectively ending the fixed wing Fleet Air Arm. Shevlin noted ruefully, 'the seeming lack of concern in many minds of both 'dark blue' and 'khaki' at the missing [amphibious] national capability, and even worse, the apparent opposition in some quarters to making good this serious national defence deficiency'.⁵⁶

Shevlin's views were shared by only a minority of ADF officers. In the late 1970s and 1980s there was little in the way of sustained writing on amphibious capabilities. Instead there was a spattering of articles by Navy and Army officers on the subject. These articles included plans to create a special naval infantry battalion; recommendations to end Australia's 'amphibious incapability' by revitalising

the structure of the Australian Amphibious Squadron; and schemes to develop a Forward Operating Base (FOB) concept using small scale amphibious forces and special watercraft such as hovercraft, landing craft and rigid raiding craft.⁵⁷

Such ideas ran counter to the official drive towards the policy of Defence of Australia in the mid-1980s. In 1986, following the phasing out of a carrier capability, the Australian Amphibious Squadron was disbanded. In both the 1986 Dibb Report and the 1987 White Paper, amphibious resources and joint maritime operations were largely ignored.⁵⁸ ADF seaborne contingencies in the South Pacific, including Operation *Morrisdance* during the 1987 Fiji crisis and later Operation *Lagoon* in Bougainville in 1994, did not significantly change the continental/northern approaches defence thrust of Australian policy.⁵⁹

The Pacific contingencies did, however, demonstrate how the lack of helicopter carrier capability limited ADF offshore flexibility and this contributed to an important procurement decision. In 1993, the ADF acquired two American *Newport*-class landing platform helicopter (LPH) ships for conversion into amphibious transport personnel (LPA) ships with logistics-over-the-shore and assault landing craft. Once modernised and upgraded by the turn of the century, these ships are expected to give the ADF the capability to deploy a battalion group with helicopter support. But although the ADF improved its technical capability for land force operations from the sea, this development could not disguise the years of institutional and doctrinal neglect, cost-cutting and lack of single-service interest. These factors have resulted in Australian amphibious expertise being confined to the ADF Warfare Centre and to a few individual Army and Navy officers scattered throughout the ADF.⁶⁰

Australian Amphibious Writing in the Post-Cold War Era

In the 1990s, ADF writings on amphibious operations had to take account of the great changes in conventional military technology since the 1970s and the transformation of international security following the end of the Cold War. In the 1990s, free from nearly half a century of East-West confrontation, the leading Western powers began to move away from Mahanian ideas of blue-water navies and open-ocean warfighting towards Corbettian ideas of maritime force projection and the concept of operational manoeuvre from the sea (OMFTS). This shift represented a major doctrinal change towards a strategy of joint maritime warfare. Amphibious operations were transformed by the nexus between precision firepower and manoeuvre warfare and by the integration of over-the-horizon (OTH) attack and force projection using helicopters, information warfare systems and strike missiles.⁶¹

These trends were reflected in the meagre number of amphibious writings which appeared in Australian publications by the mid-1990s. In March 1996, Major R. E. Moyse, a Royal Marine exchange officer and amphibious warfare expert at the ADF Warfare Centre, argued that it was possible that Australia's extraordinary neglect of amphibious operations – especially with regard to mobility – was a form of 'cognitive dissonance'.⁶² Moyse believed that ADF strategists lacked a true understanding of the complex relationship between strategic, operational and tactical mobility. He wrote:

...The defence of Australia is a unique military problem. Nowhere else does an island continent have to be defended by a Regular Army Infantry strength of 5 Battalions. Despite the uniqueness of the problem the solutions applied by the ADF appear to owe more to philosophies which have arisen in Europe, for continental warfare in an infrastructure-dense environment, than to our own geographical reality... Sydney to Exmouth Gulf, by sea or road, for example is as far from Exmouth to Madras... or three times the distance of Hitler's deepest penetration into the Soviet Union...⁶³

Moyse felt that Australian commanders were viewing mobility and manoeuvre within a European rather than an Australian context. He pointed out that the so-called *sea-air gap* was in fact a sea-air-land gap which required that the Army think seriously about its role in offshore operations in the northern archipelago.⁶⁴ He noted that the Army in the Twenty First Century (A21) Review, announced in the 1994 White Paper, was limited to creating mobile task forces for operations on continental Australia and ignored amphibious mobility. Moyse suggested that modern amphibious operations had to be seen in the broader context of operational manoeuvre from the sea.⁶⁵

Like Butler, Johnson and Shevlin before him, Moyse was sceptical of depending on Australia's overland transport routes from south to north which he felt offered little scope for dispersal and were vulnerable

to interdiction from the air. He was also wary of relying too heavily on air deployment of land forces because strategic airlift was not the best method for moving vehicles and heavy equipment. The ADF needed both sea and air mobility. 'Amphibious and air mobility', he wrote, 'are complementary and synergous with one another. The former provides weight and endurance while the latter provides speed of response'.⁶⁶ But Moyse was convinced that Australia could not implement land force operational manoeuvre unless it embraced the range, endurance and speed associated with maritime operations. This was best achieved by 'endowing land force tactical combat power with amphibious mobility'.⁶⁷ A seaborne force could cover 600 kilometres in twenty four hours and was capable of outmanoeuvring a land based opponent. An amphibious battalion group poised off King Sound could, for instance, cover the area from Barrow Island oilfield to Darwin at a fraction of the cost of land based forces.⁶⁸

Like Shevlin, Moyse identified lack of strategic direction as the main handicap to the development of a credible ADF amphibious capability. Since none of the services had a particularly vital interest in promoting amphibious warfare in the resources scrum there was a 'Catch 22' situation because 'lack of representation has lead [sic] to lack of strategic direction, which in turn has in turn perpetuated the lack of representation'.⁶⁹

Without a single point of amphibious responsibility to develop a concept of operations and an amphibious force structure there could be no real progress. While welcoming the acquisition of the LPAs, Moyse warned that in the ADF, 'it is clear that many people's perceptions of amphibious warfare owe more to 1945 than 1995'.⁷⁰ The progress associated with the LPA acquisition had taken place in spite of defence policy rather than because of it. Too many uniformed officers and defence officials still equated amphibious warfare with visions of costly over the beach assault and seemed unaware of new developments in maritime manoeuvre using sea delivered airmobile forces. 'The whole art of amphibious operational manoeuvre', he remarked, 'is to turn a potential assault into an unopposed landing by using superior mobility, supported by deception and stealth where appropriate'.⁷¹ Moyse concluded, 'a Concept of Operations [for the ADF] must take account of possibilities provided by both the concepts and technology of the late 1990s, not the 1940s'.⁷²

In October 1996, Lieutenant Commander John P. Robinson, a former Director of Joint Warfare Navy between 1988 and 1991, also questioned the ADF's conception of mobility and manoeuvre.⁷³ Robinson drew on the willingness of the new Howard Coalition Government to embrace the idea that 'Australia's defence does not begin at our coast-line' and the growing Government recognition of 'a need to



Army LCM 8's being recovered to HMAS Tobruk.
Exercise initial landing 99



increase the flexibility and deployability of highly capable Army elements'.⁷⁴ In this new context, Robinson argued for a fuller appreciation by the ADF of operational manoeuvre from the sea as a component of a new approach to amphibious warfare.⁷⁵ He pointed to the ADF's problems in moving fuel during *Exercise Diamond Dollar* in 1997, problems which were only alleviated by using a landing craft heavy (LCH) in the Cape York area. Like Moyse, Robinson saw great value in an ADF amphibious force which could use helicopters and mobile troops to rapidly deploy along the seaward flank of an area of operations.⁷⁶

Like Butler and Shevlin, Robinson saw the need for a highly mobile land force composed of "Marines" in all but name.⁷⁷ The Army of the future had to be able to respond to a variety of scenarios including deploying and lodging on to isolated and distant territories, or securing a forward operating base such as an airhead. But developing a joint amphibious force into what Robinson styled as 'a key ADF Defence capability' required not only a sea-mobile army but also redefining Australian amphibious doctrine 'as a function of Manoeuvre Warfare'.⁷⁸ He recommended that the ADF examine a new concept of operations based on operational manoeuvre and create a Joint Project Team to advise Commander Australian Theatre (COMAST).⁷⁹

Lessons from the Writings of Australia's Amphibious Theorists

What lessons can be drawn from this brief survey of the writings of the Australian amphibious warfare theorists? There are perhaps three that are worth noting. First, the long and often futile struggle of the amphibious theorists to achieve official recognition, suggests that they encountered a peculiar Australian strategic culture which was largely indifferent to the requirements of joint seaborne operations. Second, the writings of the amphibious theorists help us to understand the dichotomy between continental and naval thinking in current Australian military thought. Third, the seaborne warfare advocates assist us to comprehend the dynamics of the strategy-force mismatch in present defence policy.

The Problem of Strategic Culture

All the amphibious writers examined highlight the lack of cultural affinity with the sea which has contributed to Australia's rather weak maritime – as opposed to naval – tradition. It is perhaps significant that the most important of the Australian amphibious theorists were officers with either backgrounds in the Royal Navy and the Royal Marines, or exposure to the thinking of the United States Marine Corps. Unlike many ADF officers, they were comfortable with the idea of the sea as an arena for joint mobile operations.

This suggests that, while the reluctance of the ADF to embrace amphibious warfare is underpinned by half a

century of single service differences, resource problems and often unfavourable strategic guidance, it may be – as B. N. Primrose and Kim Beazley have implied – at root, a problem of Australian strategic culture. Although the concept of strategic culture is a methodologically difficult field, it has produced a growing literature in recent years.⁸⁰ A strategic culture has been tentatively defined as 'the habits of thought and action... of particular military establishments' or 'the set of attitudes and beliefs held within a military establishment concerning the political objective of war and the most effective strategy and operational method of achieving it'.⁸¹ A strategic culture is a complex accretion of ideas about war which, despite changing circumstances, tend to reappear in new guises and often demonstrate a persistent affinity with the past.⁸²

From the perspective of strategic culture, it is possible to mount a case that the Army's experience of large scale land warfare in Europe and the Middle East created a preference for continental warfare. With respect to the RAAF and the RAN, their operational experience has largely been gained in a coalition rather than an independent framework. In short, Australia's strategic culture is distinguished by the lack of a joint national approach to war. As Commander Shevlin noted in 1980, a lack of a national policy was a feature of Australia's experience of amphibious operations in the South West Pacific during the Second World War. For most of the campaign, Australian vessels and troops were under American command and were not permitted to operate as a national force.⁸³ In a real sense, Australia, for most of its history since 1945, has possessed a military culture which has never properly understood the seaborne land force requirements of a joint maritime strategy. This is particularly striking when it comes to the problem of mobile operations. Further research into Australian strategic culture may yield important insights into Australia's curious neglect of the sea in joint service operations.

The Dichotomy between Continentalism and Navalism in Australian Strategic Thought

The writings of the amphibious advocates help illuminate the way in which defence policy since the 1970s has perpetuated the dichotomy between the Army's continental ethos and the Navy's blue water preference. The origins of this division in Australian military thinking between continentalism and navalism can be traced back to the Federation era of Alfred Deakin and Andrew Fisher and to defence planning in the inter-war period.⁸⁴

The writings of Butler, Johnson, Shevlin, Moyse and Robinson implicitly challenge the continental-naval dichotomy in Australian strategic thinking. They contest what Stewart Woodman and David Horner have defined as the Army's 'continental warfare ethos'.⁸⁵ If Australian amphibious theorists have one important feature in common, it is their compelling belief in the need for Australia to develop a marine-

style Army. They have been sceptical of what Major Moyse identified as the Army's European mindset – a mindset which tends to conceive of organisation, mobility and manoeuvre in a land-based continental strategic context.⁸⁶



Soldiers from Alpha Company, 2 RAR conduct beach assault. Exercise initial landing 99

The amphibious strand of Australian military thought also implicitly challenges the Royal Australian Navy's gradual transformation since the 1970s into a defensive 'sea-air gap' force without aircraft carriers, seaborne land forces or significant capability for inland force projection. In investigating the requirements of an Australian maritime strategy, recent writers such as Commodore W. S. G. Bateman and Commander R. J. Sherwood, have emphasised the predominant role of naval and air platforms over joint forces and the use of sea control rather than littoral operations.⁸⁷ This navalist preference is reflected by Sherwood's and Bateman's comment in 1992 that, 'the predominant role of land forces in the defence of Australia's interests is only important if the nation's maritime strategy has failed'.⁸⁸

In 1997, an assessment of the future direction of Australian maritime strategy reinforced this navalist approach. It argued against a shift towards a littoral warfare posture stating that 'Australian naval forces are intended for sea control in the sea-air gap in the northern approaches to the country'.⁸⁹ Yet as the leading American maritime scholar, John B. Hattendorf has warned, the words 'naval and 'maritime' are not synonymous because 'a maritime strategy involves much more than a navy'.⁹⁰ A maritime strategy is about the comprehensive direction of all aspects of national power to achieve policy goals using the sea.⁹¹

The Strategy-Force Mismatch in Current Australian Defence Policy

The work of the amphibious theorists also helps to expose the presence of a strategy-force mismatch in

Australian defence policy. The policy trends since the 1970s that have driven the Army towards continental land operations and the Navy and Air Force towards a platform-oriented defence of the northern sea approaches, represent a divergence rather than a convergence in strategic thought. This has led to a lack of coherence in defence planning.

Since 1987, Australian strategy has conceived of a layered, vertical defence in depth placing the Army *behind* rather than *alongside* the Navy and the Air Force. This is a misconceived approach to defence planning. It prevents the emergence of a genuine joint maritime strategy because it divorces the Army from any significant role in the sea-air-land gap. The result has been a strategy force-mismatch between a mainland defence role for Australia's ground forces and a navalist-aerospace strategy for the RAN and the RAAF in the northern approaches. These opposing and centrifugal trends are most strikingly revealed in the Government's 1997 publications, *Restructuring the Australian Army* (RTA) and *Australian Strategic Policy* 1997 (ASP 97).⁹²

Conclusion

Australia needs to undergo a fundamental strategic orientation by the early years of the next century. This should reflect the teachings of Corbett and be directed towards a joint maritime strategy as indicated by the amphibious theorists whose writings have been analysed in this essay.

There are some clear indications that change in this direction has begun – albeit slowly – as political factors, service interests and scarce resources dictate the pace of change. The conversion and modernisation of the LPAs HMAS *Manoora* and HMAS *Kanimbla* is well underway. The development of JP 2048, the program for a replacement watercraft fleet, is ongoing. The recent decision to retain HMAS *Tobruk* until 2010 gives the ADF a potential force of three amphibious ships. The implementation of an Afloat Support Study to identify maritime operational support capability and a review of amphibious doctrine by the ADF Warfare Centre are both positive steps. Finally, the establishment of Commander Australian Amphibious Forces (CAAF) in Maritime Headquarters in February 1999 with a joint staff, represents a serious attempt to give strategic direction to developing an amphibious capability.⁹³

For some defence analysts, the ADF's need to shift towards a maritime expeditionary capability and littoral warfare, is so obvious, that it cannot be accomplished quickly enough. For instance, in late 1997 the leading international naval expert, Eric Grove, observed:

...The [Australian] Army is almost twice the size of the Navy and still geared primarily to the rather



unnecessary role of defending the wilderness of Northern Australia. What is required is a root and branch restructuring of the Army into what would effectively be a small clone of the US Marine Corps, a well-equipped force capable of rapid deployment by sea and to a lesser extent by air... The [1997] Strategic Review demonstrates that things are beginning to move in that direction, as sheer strategic logic dictates such a reorientation... This trend might well also reopen the case for another capability that the RAN reluctantly lost, significantly misses, and might just get back – an aircraft carrier...⁹⁴

In his celebrated manual of political power, *The Prince*, Machiavelli, reminds us that, 'all armed prophets have conquered and unarmed ones failed'.⁹⁵ For much of the Cold War era, the advocates of amphibious warfare have been Australia's unarmed prophets. Lacking in numbers, resources, central organisation and official patronage, they consistently failed to carry their arguments in the defence debate. The armed prophets became followers of Paul Dibb and Kim Beazley and conquered the making of strategic policy. But their late Cold War design of Defence of Australia became an intellectual *cul de sac* under new and fluid strategic conditions. With the dramatic changes in international security during the 1990s, it seems as if the wheel of time and the direction of events has turned decisively in favour of the ideas promoted by Australian amphibious thinkers for nearly half a century. There is an historic opportunity for the advocates of a truly joint maritime strategy to seize the high ground in the defence debate, to transform themselves from unarmed into armed prophets and to stamp their mark on Australian strategy in the first decade of the twenty-first century.

NOTES

- 1 B. N. Primrose, 'Insurance, Deterrence, Faith: The Search for an Integrated Concept of Defence', *The Australian Journal of Defence Studies*, March 1977, I, i, p. 36.
- 2 Kim C. Beazley, 'The Development of Australian Maritime Strategy', in Commonwealth of Australia, *Selected Speeches 1985-1989 by the Hon Kim C. Beazley, MP Minister for Defence*, Directorate of Departmental Publications, 1989, p. 184.
- 3 Julian S. Corbett, *Some Principles of Maritime Strategy*, Longmans, Green and Co., London, 1911, p. 14.
- 4 *Ibid.*, pp. 14-15.
- 5 B. H. Liddell Hart, 'The Value of Amphibious Flexibility and Forces', *RUSI Journal*, November 1960, CV, No. 620, p. 492.
- 6 See Michael Evans, *The Role of the Australian Army in a Maritime Concept of Strategy*, Land Warfare Studies Centre, Working Paper No. 101, Canberra, 1998. On p. 3 continentalism is defined as 'a strategic emphasis on using land forces for the defence of mainland Australia and navalism as 'a strategic emphasis on using naval forces supported by land-based aircraft'.
- 7 Corbett, *op cit.*, p. 13.
- 8 *Ibid.*, p. 14.
- 9 C. D. Coulthard-Clark, 'Formation of the Australian Armed Services', in M. McKernan and M. Browne (eds), *Australia: Two Centuries of War and Peace*, Australian War Memorial, Canberra, 1988, p. 142.
- 10 See David Horner, 'The Army's Role in the Maritime Defence of Australia', in David Stevens (ed), *In Search of a Maritime Strategy: The Maritime Element in Australian Defence*

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Breaking the Spears: HMAS Tobruk's Involvement in Truce Monitoring Operations in Bougainville

by Commander A.K. du Toit, RAN

After nine years of civil war costing thousands of lives, the people of the island of Bougainville in Papua New Guinea laid down their weapons and symbolically 'broke the spears' at a moving ceremony in Bougainville's capital, Arawa, on Thursday 30 April 1998. On a hot and overcast day, a crowd of several thousand, including members from the unarmed multi-national Truce Monitoring Group drawn from Australia, New Zealand, Vanuatu and Fiji, assembled at midday to watch the leaders of the war ravaged province formally sign a cease-fire deal, which many consider to be Bougainville's best chance for long-term peace, reconciliation and reconstruction.

The formal signing of the cease-fire agreement, which had only been finalised by the leaders, meeting in HMAS *Tobruk*, during the early hours of that morning, was a particularly poignant culmination to *Tobruk's* recent participation in Operation *Belisi* in Bougainville, which included three deployments to the war torn island and a record breaking 73 continuous days at sea between January and March 1998 in support of truce monitoring operations ashore.

The Bougainville Conflict

Australian involvement in Bougainville stemmed from the crisis which began in 1989 when the Papua New Guinea (PNG) Government declared a State of Emergency on the island following the sabotage of the giant Panguna copper mine by local landowners demanding a greater share in the mine's profits. Fuelled by a separatist zeal, the situation rapidly deteriorated into a conflict that engulfed the entire island with the PNG government subsequently placing an embargo on all support including food and medical aid to the troubled island. The ensuing period was marked by armed conflict between the pro-independence Bougainville Revolutionary Army (BRA) led by rebel leader Francis Ona, the PNG army and a pro-PNG resistance militia, which resulted in many deaths (estimates range from 2,000 to 20,000) as a result of intermittent skirmishes and the consequent breakdown of health and food supply infrastructure. The conflict has also kept the mine closed, wrecked the island's infrastructure, sapped the PNG Defence budget and has been a painful thorn in the side of successive PNG governments.

A number of previous initiatives to secure lasting peace on Bougainville, including an attempt in 1994, which also involved *Tobruk*, proved unsuccessful and ended in a stalemate. Frustrations boiled over when, after an 18-month cease-fire collapsed in 1996, then PNG Prime Minister Sir Julius Chan hired foreign mercenaries to destroy the BRA's jungle bases. International outrage scuttled the plan and contributed to his defeat in the June 1997 PNG general election.

With new Prime Minister Bill Skate intent on peace, PNG tried again. BRA leader Sam Kauona and Joseph Kabui, Vice-President of the Bougainville Interim Government (BIG), the BRA's political wing, defied fiercely pro-independence Ona, who had largely been marginalised, by entering into talks with the PNG government and the locally elected and PNG recognised Bougainville Transitional Government (BTG). Under New Zealand sponsorship, the rival parties were invited to participate in new negotiations at Burnham in New Zealand to end hostilities. This resulted in a declaration "to achieve a lasting peace" which was signed by the leaders of the various factions on 18 July 1997.

The Burnham Declaration led to further talks in October 1997 which resulted in the Burnham Truce being signed; the formation of a combined multi-national Truce Monitoring Group (TMG); and an agreement to continue talks aimed at securing lasting peace via a permanent cease-fire. The October 1997 truce was followed in January 1998 by the New Zealand brokered Lincoln Agreement, which paved the way for the negotiation of a permanent cease-fire deal and guaranteed the phased withdrawal of PNG troops, the transition to a Peace Monitoring Group (PMG), talks on the island's political future and the election of a Bougainville Reconciliation Government (BRG).

The Truce Monitoring Group

The 200-member unarmed TMG, consisting, mainly of Australian and New Zealand military and civilian personnel, with a few personnel drawn from Vanuatu and Fiji, was established on Bougainville in November 1997, as part of Operation *Belisi*, to oversee the peace process following the Burnham talks. It was the largest multinational military

deployment in the South Pacific since 1945, excluding exercises and disaster-relief operations. Their role was to monitor and report on the factions observance of the truce and to facilitate the return of the island to normality by providing a base level of confidence from which the people could move forward. Australia committed about 80 soldiers providing logistical support plus some civilians in the monitoring teams. TMG Headquarters was established at Arawa with the Logistic Support Team (LST) established at Loloho, and four 20 member Truce Monitoring Team (TMT) sites located at Buka, Arawa, Buin and Tonu. Following the arrival of the TMG, local peace groups emerged all over the island indicating a widespread desire by the population for peace.

Tobruk's Involvement

Tobruk's involvement in Operation *Belisi* and the current peace process commenced in mid-November 1997 while alongside in Guam on a short new entry officers' training cruise, when notice was received that the ship was to participate in operations to provide logistic support to the TMG bound for Bougainville. As a result, the remainder of the training cruise was cancelled and the ship proceeded directly back to Sydney, the eight day passage being used to good effect to plan for the imminent operation.

Increasingly, the Australian Defence Force has been involved in peacekeeping and aid to civil power operations where the amphibious and sea transport capabilities of *Tobruk* has been invaluable. *Tobruk*, as the primary amphibious unit in the ADF inventory, is an extremely important and valuable asset, particularly in joint operations, and there have been few contingencies in recent years where her unique capabilities have not been required.

Operational planning continued in Sydney, while material preparations were completed in readiness for the operation. *Tobruk*, under the command of Commander G.A. Robinson, RAN, sailed from Sydney on Saturday 29 November, heavily laden with approximately 1200 tonnes of cargo and 70 soldiers, mostly medical and engineering personnel, embarked. Much to the relief of the embarked force, the six day passage to Bougainville, which lies to the east of the Papua New Guinea mainland, was completed in good weather with *Tobruk* arriving off Anewa Bay on the morning of Friday 5 December. After rendezvousing with HMAS *Success* (Captain A.W. Flint, CSC, RAN) later that day, *Tobruk* proceeded alongside the former ore carrier berth at Loloho and immediately began discharging her vital cargo which was eagerly awaited ashore.

Tobruk's cargo handling capabilities were fully utilised; the 70 tonne heavy-lift Velle derrick and

both eight tonne Favco cranes assisted with the discharge of vehicles and stores onto the wharf, while the two embarked LCM 8 landing craft conducted stern door operations to off load vehicles and equipment stowed in the tank deck. *Tobruk's* flexible cargo handling facilities and motivated ship's company ensured that the unloading operation was completed within ten hours prior to getting underway the following morning for the return passage to Sydney, where she arrived on Thursday 11 to prepare for her return to Bougainville in early January 1998.

Considerable work was undertaken during the three week period in Sydney, including the installation of two reverse osmosis plants to produce fresh water onboard. Additional communications facilities, including provision of INMARSAT B, were also fitted. Shortly before Christmas *Tobruk* was advised that her participation in operations off Bougainville were likely to extend well beyond the end of January and that the ship should be stored for ninety day endurance. Final preparations for the deployment back to Bougainville were completed by New Year's Eve, with equipment enhancements providing a greatly improved operational endurance.

73 Days At Sea

Tobruk, departed Fleet Base East on Friday 2 January to commence passage back to Bougainville to provide logistic and communications support to the TMG ashore on the war-torn island. The passage north involved the turnover of command from Commander Robinson to Commander A.K. du Toit, RAN, at sunset on Saturday 3 while transiting north off the New South Wales coast. Commander Robinson was subsequently landed by boat at Tweed Heads early the next morning and *Tobruk* shaped course for Bougainville to relieve *Success* on station in the Combined Force Area of Operations (CFAO).

Progress through the Coral Sea was hampered by Tropical Cyclone Katrina, which with almost every alteration of course made to avoid it, appeared to change direction towards *Tobruk*. After finally passing some 80 miles to the east of the cyclone, *Tobruk* passed through the Bougainville Strait and entered the CFAO during the night of Wednesday 7 January and rendezvoused with HMAS *Success* shortly after sunrise the following morning. After a three hour underway replenishment with *Success*, command team briefings and the transfer of two Sea King SK50A helicopters and associated personnel, *Tobruk* assumed responsibility as the Task Group Commander (CTG 627.9) from *Success*, which shaped course for Australia soon afterwards.

Tobruk commenced an intensive operational training programme the following day designed to integrate the embarked 817 Squadron Detachment into the ship and establish standard operating procedures in direct



support of TMG operations ashore. The aircrew quickly familiarised themselves with flying operations from both the forward and after flight decks and *Tobruk* soon settled down to an operations tempo, with the ship proceeding to sea on most days within the CFAO to maintain a patrol sector to the east of Kieta in order to avoid any confrontation or perceived breach of the truce monitoring arrangements, with the ship going to anchor in Arawa Bay each night. Because tensions were still very evident on Bougainville during the truce period, the number of service personnel permitted on the island was strictly limited. As a result, members of *Tobruk's* ship's company were unable to proceed ashore for the duration of *Tobruk's* deployment. One day a week, normally Sunday, was therefore spent at anchor in Arawa Bay for Ship's Company rest and recreation.

The Australian contingent commander, Colonel S.K. Joske, visited *Tobruk* shortly after arriving to brief the ship's company on the progress of the fragile peace on the island and a close relationship was soon established with Headquarters Truce Monitoring Group (HQ TMG) ashore. This close liaison was maintained throughout *Tobruk's* involvement in Bougainville, and Colonel Joske and his relief, Colonel J. B. Wilkinson who arrived during the first TMG rotation in mid-February, regularly visited the ship for consultation and used the facilities on board to assist with planning future military involvement in the Bougainville peace process.

Ship's Company postings and aircrew rotations commenced early in the deployment using scheduled fortnightly RAAF C-130 flights between RAAF Richmond and Aropa airfield. This greatly assisted in returning the ship to a more normal posting cycle, following the posting freeze introduced when *Tobruk's* participation in the Operation was first ordered.

HMA Ships *Balikpapan* and *Brunei* brought much welcomed changes to the daily routine on two occasions during the deployment with their resupply of fresh, frozen, dry provisions and canteen supplies. In addition, *Tobruk* refuelled from HMNZS *Endeavour*, before the latter's departure for New Zealand at the end of January, and HMNZS *Manawanui*, which regularly proceeded to Lae and Rabaul for fuel for the TMG, also provided *Tobruk* with fuel on two occasions, enabling operational endurance to be extended. *Tobruk* on the other hand, provided in theatre logistic support to the two Army LCM 8s which undertook essential TMG supply runs in Bougainvillean waters, conducted logistic resupply runs and medivac flights using her two embarked SK50 helicopters and transferred diesel and aviation fuel ashore as required.

The Ship's Company responded remarkably well to the demands placed upon them and their families as

the peace process ashore gained momentum. During the deployment, *Tobruk's* entertainment committee worked tirelessly to provide entertainment and activities for the TMG members ashore and the ship's company. With many days akin to 'Groundhog Day', activities to dispel the boredom included Australia Day celebrations, steel deck barbeques, big screen movie nights, a comedy night, celebrity heads auction, quiz and tombola nights, stern door swimming and regular screening of 'Rat News', the ship's onboard television programme. Communication with families was maintained with the full range of communications facilities available. Sport and fitness sessions were a major focus with over 100 PT sessions conducted.

Tobruk remained in the Bougainville CFAO, in direct support of the TMG, until Tuesday 10 March before returning to Sydney for much needed maintenance and leave after spending 73 demanding days at sea since departing Fleet Base East (FBE) on 2 January. *Tobruk* was relieved on station on Tuesday 10 by HMAS *Labuan* (Lieutenant R. D. Knights, RAN). The two ships rafted up while at anchor in Arawa Bay to effect the transfer of necessary stores and fuel and complete a command team briefing. Key personnel from the TMG visited the ship during the handover, ensuring that *Labuan's* command was as fully prepared as possible prior to *Tobruk's* departure. CTG 629.7 responsibilities were transferred during the Dogs and *Tobruk* commenced the five day passage to Sydney shortly afterwards.

With the assistance of the strong East Australian Current, *Tobruk* arrived back in Sydney on the afternoon of Sunday 15, on an unseasonable grey and damp day and berthed at the Fleet Base in Woolloomooloo Bay. *Tobruk* was met by Maritime Commander Australia, Rear Admiral C.A. Richie, AM, RAN, and hundreds of friends and family members of the Ship's Company. Shortly after berthing, Admiral Richie briefly addressed the Ships' Company and recognised their achievement in keeping the ship operational throughout the deployment, before presenting Australian Service Medals with Bougainville clasp. The deployment of *Tobruk* to Bougainville was a demanding operation for the ship and her ship's company. However, the challenges, and at times monotony of enduring 73 continuous days at sea were far outweighed by the operational focus and the desire to see peace break out on the beautiful, but troubled Island.

Cease Fire Agreement

Following a brief respite in Sydney, during which time essential defects were rectified and some very welcome leave taken, *Tobruk* sailed for Bougainville on Wednesday 15 April for the third successive time in six months. On this deployment, *Tobruk* carried some 100 soldiers, three Iroquois helicopters from

171 Reconnaissance Squadron, and a number of vehicles, generators and plant equipment to support the transition from the New Zealand led TMG to the Australian led PMG.

The six day return passage to Bougainville was made in benign conditions, which was greatly appreciated by the embarked force, who had plenty to do with lessons including health and hygiene, local customs and culture, public relations and *Tok Pisin*, the language of the Bougainville people. *Tobruk* entered the CFAO on Monday 20 April, and berthed at Loloho Wharf in Anewa Bay at 0800 on Tuesday 21 April to commence discharging cargo. The majority of the embarked force, however, remained on board for the week, thereby relieving the pressure on the limited resources and facilities ashore during the major change-over of personnel.

In contrast to her previous deployment to Bougainville, *Tobruk's* ship's company participated in many activities ashore during the period alongside, in particular a very moving ANZAC Day dawn service at the war memorial at Kieta which had recently been reclaimed from the jungle. The service was a highlight and particularly significant with both Australians and New Zealanders serving together in theatre.

During this visit, *Tobruk* was the venue for a series of meetings to finalise the cease-fire agreement that was to be signed on Thursday 30 April. These meetings were rescheduled on several occasions, due mainly to difficulties in assembling the representatives of the various factions. After a number of preparatory meetings, the leaders' of the warring factions arrived on board at 1000 on Wednesday 29 April and commenced a long and at times charged meeting that finally reached agreement during the early hours of the next morning – less than six hours before the formal cease-fire signing ceremony was due to be held in Arawa. With supporters of the various parties gathered on the jetty, the Commanding Officer of *Tobruk* was invited to the closing remarks of the meeting and witnessed the emotional atmosphere as the leaders agreed to strive for a peaceful conclusion to the crisis that has divided their potentially prosperous island. As a final gesture, the chairman presented Commander Du Toit with spears and a bow and arrows, symbolic and poignant gifts to demonstrate that the people of Bougainville were turning away from violence as a means of settling their differences.

After nearly six months involvement with operations in Bougainville, *Tobruk* finally sailed for Sydney at first light on Thursday 30 April, shortly after the completion of the leaders' talks onboard, her Ship's Company buoyed by their involvement in the peace process and their proximity to the focus of activity during the final days before the signing of the cease-fire agreement.

Lessons Learnt

Tobruk's participation in operations in Bougainville once again highlighted the importance of a deployable and sustainable off-shore ADF amphibious lift capability in support of regional contingencies and reinforced the continued versatility of *Tobruk*. There were two important lessons flowing from *Tobruk's* involvement in Bougainville from the Navy's point of view. Firstly, it again confirmed that the RAN is well equipped and organised to conduct operations offshore. The Gulf war and Somalia experiences, and now Bougainville, have proved invaluable and much was learnt. All three operations were particularly rewarding in that they showed that the Navy is capable of conducting operations offshore in support of Government direction. Secondly, *Tobruk's* involvement in Bougainville again reinforced the need for an amphibious capability in the ADF. The logistics and sea transport roles, which are part of an amphibious capability, ensure that any Defence dollar spent in this area is a good investment. It also confirms that if we look at likely Defence scenarios which may confront the ADF over the ensuing years, there are few that would not require an amphibious capability as part of the solution.



HMAS Tobruk with 2 RAR embarked returns to Townsville after exercise initial landing 99



A Navy Perspective of the Rise of Amphibious Capability

By Commander Warren Johnston, RAN

Introduction

In 1971 the first of six Landing Craft (Heavy) (LCH) HMAS *Balikpapan* was commissioned into RAN service. In 1977 HMAS *Jervis Bay* was acquired followed in April 1981 by the Landing Ship (Heavy) (LSH) HMAS *Tobruk*. These ships have provided the mainstay of the ADF's Sea Transport capability during the last two decades.

With the demise of the Commander Australian Amphibious Squadron and the run down of HMAS *Moreton* in the mid 1980's, the emphasis on, and level of corporate knowledge of, amphibious warfare declined across the ADF. Although the RAN participated in some amphibious warfare exercises the practical focus was clearly on sea transport.

In the early 1990s changes to regional stability and gradual revision of strategic policy saw the amphibious requirement and capability picture begin to change. The purchase of two ex USN Newport Class Landing Ship Tank (LSTs) was approved in December 1993 with HMAS *Manoora* (Ex Fairfax County) arriving in Australia in September 1994, and HMAS *Kanimbla* (Ex Saginaw) arriving in November 1994. The new arrivals boosted overall major ship numbers within the Force Element Group (FEG) from one to three. A recent decision to retain HMAS *Tobruk* until 2010, and the approval of a Life of Type Extensions (LOTE) for five of the LCHs provided further certainty and capability within the FEG and accords with the latest strategic direction.¹

By the year 2000 the ADF will possess a FEG of significant size, equipped with purpose built ships, modified to suit ADF requirements, with the capability to move relatively large quantities of equipment and numbers of personnel long distances over the sea. Organic air and watercraft assets will allow the landing of personnel and discharge of cargo without the requirement for harbour or port facilities.

From a modest and declining baseline in the late 80s there has been a considerable increase in amphibious lift capability in the RAN. In addition to capital expenditure, and despite chronic personnel shortages, the Chief of Navy, with the support of Chief of Army, has approved the creation of a Commander Australian Amphibious Forces (COMAUSPHIBFOR) at the Captain RAN level supported by a small Navy and Army staff. COMAUSPHIBFOR will provide a focal point of control and administration and establish a centre of excellence for the amphibious FEG.

Types of Operations

An amphibious force is described as "a naval force and landing force, together with supporting forces that are trained, organised and equipped for amphibious operations."² Amphibious operations are operations during which land forces are landed and supported from the sea. They encompass all aspects of planning, mounting, sea passage, landing and supporting the landed force until achievement of the mission, and may also include extraction of a land force. This amphibious role for the ADF is now defined as amphibious assault and replaces the previous ADF term of Amphibious Tactical Lodgement (ATL).³

Each LPA will be able to transport in excess of four hundred troops for prolonged periods and, together with the LSH, will be able to embark and transport a battalion group. Lodgement of the force ashore would be achieved by a combination of helicopters moving personnel and light stores and LCH and LCM8 moving vehicles and bulk stores. These assets would also provide the follow-on support of the landed force. The current modernisation will provide the LPAs with a deployable JFHQ facility, enhanced C3, and Level 3 medical and dental facilities for deployed forces.

In peacetime, the amphibious FEG is capable of participating in a range of military support operations including logistic support to land operations, Defence Assistance to the Civil Community tasks, search and rescue and general naval and aviation training. In a disaster relief role the ships can transport rescue personnel and equipment and if necessary embark large numbers of civilians for short periods. The extensive medical facilities in the LPAs would be particularly useful in such circumstances.

Some Limitations

The expanded amphibious FEG will be a welcome and useful addition to ADF capability. However, there are already signs that expectations are exceeding the realistic capability, which can be delivered. Unless part of a coalition force, any amphibious assault planning will need to be tempered by the limited availability of sea based fire support, air cover and follow on resupply of large quantities of sustainment supplies. Unless quickly reinforced and resupplied the initial landing force will be limited in the tasks which it could realistically be expected to achieve. It must

also be remembered that the ships within the FEG are not new. The youngest ship (*Tobruk*) is almost 20 years old and the oldest ship (*Manoora*) approaches her 30th birthday. Despite modernisation these ships have inherent design limitations which control the amount of equipment that can be carried and the pace at which landings can occur. Some specific limitations are discussed in the following paragraphs.

Troops Ashore

The composition of the embarked land force will be tailored for the mission but will nevertheless be restricted by the physical capacity of the vessels particularly if the force is to remain at sea for some time. A force, which is 'crammed in', will quickly lose its fighting edge if it is unable to conduct weapon training, physical exercise and sleep well. The total number of embarked troops does not necessarily represent the number of combat troops, which can be landed to take objectives. Overall embarked numbers may include special forces personnel, clearance diving teams, aircrew and aircraft maintainers, medical staff for the level three facility, beach team(s) LCM 8 and other watercraft crews and maintainers. The staff of the deployed headquarters will, of course, also be included in embarked force numbers.

LCH/LCM 8

The LCH is a very capable vessel able to carry large cargoes (3 main battle tanks) over long distances. The main limitation of these vessels being their slow speed (maximum 10 knots), and therefore the time it takes to deploy to an AO. Each LPA and the LSH can carry two LCM 8 with each vessel able to transport 200 personnel or one tank. The slow speed (8 knots) of these craft is a major limiting factor. A joint project is underway to find more suitable replacement watercraft.

Aircraft

The LSH is cleared to operate most ADF helicopters but has no hangar/shelter to offer protection or maintenance facilities for embarked aircraft. Two aircraft, one of which could be a Chinook, can be operated from two flight decks. The LPAs will undergo first of class flight trials in order to determine the safe limits and numbers of aircraft which can be operated from each ship. Although the physical space appears ample to support a large number of helicopters, the practicalities and safety considerations will limit numbers of aircraft that can be operated. Night operations and adverse weather conditions are factors that cannot be ignored.



LCM8 crew prepare to come alongside HMAS *Tobruk* during exercise initial landing 99



At first glance Sea Kings, with their folding blade, large carrying capacity and marinised engines would appear to be the ideal helicopter for amphibious operations. However, the Sea King is not configured for battlefield operations, crews are not regularly practised in tactical insertion tasks and numbers are limited. The Blackhawk is the Army preferred battlefield helicopter however; it is not marinised and may have considerable difficulty in operating at sea for protracted periods. A joint project is underway to enhance both types of helicopter for amphibious operations, but a mix of helicopter types would complicate and increase the cost of sustainability during operations.

The Future

A considerable amount of attention is now being directed toward amphibious warfare both politically and within the ADF. The ability to deploy a large contingent of Army both in the direct defence of Australia and offshore is likely to remain a government priority for some time to come. There is every indication that the region will remain unstable well into the next century and there will always be a requirement to provide emergency assistance both within Australia and the region. The ADF in general, and the RAN in particular, have limited amphibious warfare experience and will need to develop the necessary skills and doctrine as a matter of some urgency.

The acquisition of the two LPAs and the general increase in amphibious capability will provide a reasonable capability to about 2015. Experience and lessons learned in the coming years will inform the capability required to replace Tobruk and the LPAs.

To maximise the full capability of the amphibious FEG will require commitment from all the involved parties. By their very nature, amphibious operations are joint. The more we practise and develop doctrine and experience in amphibious operations, the better we will be at the conduct of joint warfare. The unconventional introduction of the LPAs and the reinvigorating of the LSH and LOTE of the LCHs will require resource commitment if their full potential is to be exploited.

Until recently CMDR W. Johnston RAN was the Director Amphibious and Afloat Support Capability Co-ordinator within the Naval Headquarters Canberra. He would like to acknowledge those who provided input to this article, and in particular LCDR Russ Dowrick RANR.

NOTES

- 1 Australian Strategic Plan 1997 Page 66.
- 2 ADFP 101.
- 3 Amphibious Assault includes two subcategories namely, Amphibious Assault on a potentially hostile shore (what was ATL) or an Amphibious Assault on a hostile shore. ADFP 12 Chap 1 Para 9.



HMAS Protector and SMS *EMDEN*

by Commander Robin Pennock, RAN(Rtd)

HMAS PROTECTOR, a 960 ton Type F1 cruiser was built by Sir William Armstrong, Mitchell & Company at Newcastle upon Tyne, England for the South Australian Government and launched in 1884 specifically for duties in the relatively shallow waters of Spencers and St Vincent's Gulf. In 1900 she became the only (Australian) Colonial warship to take part in the Boxer Rebellion in China, being specially commissioned into the RN for the task. Post Federation she became one of the main units of the newly formed Commonwealth Naval Force and in those early days voyaged to Sydney so that their Naval Brigade could be trained at sea. Rearmed many times, by 1915 her armament had been reduced from the original outfit of 1 x 8" and 5 x 6" guns plus 4 x 3pdrs to somewhere approximating her 1918 outfit of 1 x 4" gun, 2 x 12pdr and 4 x 3pdr.¹

William Rooke Creswell, (Later Vice Admiral Sir William, KCMG KBE) was probably her most well known Commanding Officer having held command in 1891 and from 1893 to 1900 and again for a short period in 1900.

Part of a German squadron of warships commanded by Admiral von Spee, the cruiser *EMDEN* departed from her base at Tsingtao, China on 31 July 1914, four days before the outbreak of World War I. Although her remaining life was to be short, it was to be successful as a surface raider as she moved from the north coast of China to the Indian Ocean. Some of her victims were the merchant ships *INDUS*, *LOVAT*, *KABINGA*, *KILLIN*, *CLAN MATHIESON*, *KING LUD*, *TYMERIC* and *GRYFEVALE*. Overall, in that four month period before her demise she sank or captured 23 vessels of a value, in 1914 figures, of £2,000,000.² She is of course best remembered for the attack on the cable station at Direction Island in the Cocos-Keeling Group and, on 9 November, her short fight with the Australian cruiser *SYDNEY* and subsequently being driven ashore on North Keeling Island. The remainder of Von Spee's squadron voyaged by a separate route for South America and created havoc at the battle of Coronel before being sunk at the Battle of the Falkland Islands. But that has all been covered before.

News of the battle between *Sydney* and *Emden* spread quickly, and HMS *Cadmus* a 1,000 ton sloop of the China Squadron was dispatched from Singapore to recover any guns, torpedoes and the like from the wreck, reports indicating that in company with the cable steamer *Patrol* she was there between 18 and 27

November. A further task assigned her was to dispose of all the bodies remaining onboard and burying those washed up on the beach. The subsequent report³ by her Commanding Officer on the state of the wreck was comprehensive but stressed the work of Surgeon G.D.G.Fergusson RN, who with four sailors worked under very difficult conditions "owing to the appalling stench of decomposing bodies". With another party, Lieutenant F.C.Platt RN had searched the island "in case of treasure having been landed and buried". *Cadmus* removed a number of mementoes and these were passed to the Australian Government.

The Auxiliary cruiser *Empress of Japan*, in words taken from Commander Patrick Weir's subsequent report⁴ "was engaged in looting the wreck" from 2 – 7 January 1915. HMAS *Pioneer* also visited the wreck in January 1915 to recover more specie, including a large number of Mexican dollars. HMS *Cadmus* made a second trip from 29 January until 3 February of 1915 taking away all the guns and torpedoes that she was able to dismount and tranship. Finally there is a report of the steamer *Handley* coming from Sydney with a film crew embarked.⁵

In Australia the Naval Board had been giving serious consideration to salvaging the wreck using private contractors and Messrs Darnel & Co offered to purchase the wreck for £2,000. A further offer was made by a Mr Richard Nuttall and his consortium – they wished to recover the wreck and display it at various Australian ports.⁶ Further offers were received including ones from Japan and the United States. On 27 April the Naval Board recommended to their Minister that an offer of £4,000 from Messrs Darnley & Co be accepted.⁷ Subsequently this offer was not taken up and mention was made of the 30 year old ex-South Australian cruiser *Protector*.

A Notice of Tender was placed in several editions of the Commonwealth Gazette in 1915⁸ and advertisements were placed in selected newspapers and by June a total of six tenders had been received, with the Naval Board this time recommending that an offer of £ 4,700 from Mr Charles Read be accepted.⁹ Again nothing seemed to happen and in October the Commonwealth approached the South Australian Government for an extension of service of Commander Patrick Weir RANR (Rtd).¹⁰

Patrick Weir, who amongst his many achievements had in earlier days constructed the Weir's Azimuth Diagram, joined the SA Naval Reserve as an Able Seamen at age 35 although holding a Masters Certificate. Concurrent with his promotion to Warrant



Officer in 1891 he was appointed Master of the steam lifeboat *City of Adelaide*. Promoted Sub Lieutenant in January 1896 and Lieutenant in May 1900. Appointed Second Lieutenant of *Protector* he served in that vessel in China, returning in January 1901. He later became owner of a towage firm, and in 1915 was Harbour Master at Port Adelaide, aged 60.

Because of his vast experience he had been approached by Rear Admiral Creswell to assume command of *Protector*, then temporarily commissioned as a Fleet Auxiliary to escort and/or tow a bucket dredger from Sydney to Fremantle for dredging work at the proposed Henderson Naval Base in Cockburn Sound. The tow was successfully carried out between 16 September to 13 October 1915, *Protector* having had to steam from Melbourne to Sydney to collect her charge, *Dredge Number 33* and calling at Port Adelaide to embark coal and a number of naval reservists on her way to the West. The Officers and Engineers were a mixture of RAN and Merchant Service, but all the ships company were naval, the great majority being reservists.

On 15 October, Two days after arrival in Fremantle, Commander Weir was further tasked to take *Protector* into the Indian Ocean as far as the Cocos-Keeling Islands and to report on the condition of the wreck of the *Emden* and see whether it was suitable for recovery or salvage. Unbeknown to him a large amount of towing equipment and two civilian divers, the senior one named Becket had been engaged and dispatched by steamer to Fremantle to join *Protector*.

On 16 October Commander Weir, in a hand written letter to Admiral Creswell,¹¹ suggested that perhaps the Naval Board should hire a more suitable vessel for the task, and that coal stocks should be sent to Cocos Island to support whichever steamer was chosen. Creswell decided that the Boards' decision should stand and that *Protector* should be used. Diver Becket arrived in Fremantle and for a while things seemed to go wrong.

On 28 October, the District Naval Officer Fremantle sent the following telegram to the Naval Board:

*... "From Captain Weir, "Protector" to Naval Board. Becket arrived and explained plan with which I do not agree. Want of confidence in men, ship appliances and arrangement preparation for the expedition and work, rendering it undesirable for me retaining command. Prospect hopeless for success of small operation. Respectfully ask permission to resign command "Protector" if towing finished. Recommend Anjus Hislop experienced shipping master willing and would suit Becket better than I would. Regret necessity for this step but feel it best for all concerned." ...*¹²

At 11pm the same day, the Naval Board replied to Weir's telegram amending the original directive and

stating that they now only required a report from Cocos on the state of the *Emden*, for Weir to salvage any equipment that was removable if salvage not feasible, and in view of the changes whether the objections (Weir) still held as they were reluctant to have a change in command. A subsequent signal from Weir assured the Board that he was now quite agreeable to proceed and that Diver Becket had been shown the amended instructions and his attitude was now quite satisfactory.

In retrospect it would appear that Becket had no hope whatsoever in taking charge of this operation. The main players in the drama, Rear Admiral Creswell – Naval Board, Captain C.J. Clare – District Naval Officer Fremantle and Commander Weir had all served together for many years in the South Australian Naval Force and in *Protector*. They all knew that vessels capabilities, age and condition.

Protector eventually departed Fremantle at 11 am on 3 November 1915 with 60 tons of coal in bags as deck cargo, plus 2 divers and 4 cases of explosives but no specialised towing gear. She called at Geraldton on 4 November for coal and water, departing the next day, this time with the additional coal and fresh water as cargo. There were 50 tons of coal in bags and 16 ton of fresh water in tanks on the well deck, 10 ton of coal in bags in the mess decks and 8 ton of coal in bags on the poop. With 172 tons of coal in the bunkers she had a total of 240 tons embarked.

She departed Geraldton at noon on Friday 5th November setting out on the 1412 mile journey. For two days, under the influence of a south easterly wind all possible sail was set and later as the full effects of the trade wind were felt the poop awning was set as a square sail on the port yardarm. Under these conditions she was making between 6 & 7 knots and consuming only 9 tons of coal per day. Could this perhaps be the last time that one of the RAN warships had proceeded under sail? On arrival at Port Refuge on the morning of 14 November calculations were made that they had consumed 80 tons of coal at the rate of 17.6 miles per ton. Further calculations were made and Weir decided that they would need 150 tons for the return voyage giving them 10 tons to expend at Cocos. They remained overnight at the main island and departed for North Keeling Island, about 16 miles away the next day, Weir having decided that to conserve fuel he would remain at or near the wreck site rather than returning to Direction Island each evening as the other vessels had done.

The first sight of the *Emden* did not enthuse Patrick Weir, and I quote from his report:¹³

...As we approached, it became evident that all hope of getting her off was out of the question as the stern half of her hull had completely disappeared as far as the stump of the third funnel which could just be distinguished... her bows



being about... cables from the beach... drifted down before the wind with two leads giving soundings suddenly changed from no bottom at 20, to 7 fathoms about 1... cables off the wreck. Dodged about as close in as was safe for about half an hour to see if there was any possibility of boarding the wreck from a boat, but at uncertain intervals a heavy sea would break over her, nearly as high as the funnel, which would have completely swamped any boat at all near her...

Not being able to do much more at the time, *Protector* was moved around to the west side of the Island and anchored in smooth water in 7 fathoms, laying out both bower anchors as a precaution against inclement weather. Although recovery of some artefacts was possible, the coal state dictated that she could only remain for one week. A boat was lowered and Weir, with some of his officers and crew landed on the island and walked the one mile to observe the wreck from the beach. He again concluded that there was nothing they could do regarding *Emden*. There was however a great deal of wreckage cast up on the beach including great quantities of cork slabs, a steel mast complete with fighting top, mess tables, seats, boat masts and spars etc.

After all the effort and hard work, the death knell to any salvage attempt was sounded in *Protector's* telegram of 15 November, which simply stated:

... "At wreck am unable to board, sea breaking right over. Stern half of wreck disappeared salvage of vessel quite impossible, standing by for better weather. Wind South East fresh."...

For the next three days there was more wind and sea so for two of those days the ships company were landed in watches to allow them to explore the island and one suspects, to obtain some relief from the hot conditions onboard. On the last day the routine returned to normal and there was a full days gun drill.

Friday 19th brought no change in the weather but they got underway at about 0630 and steamed around to the wreck once again on their way to Direction Island. From Weir's report:

... "A high sea was running and frequently making a clean breach over the wreck. Dropped down stern first, and took several snaps of the wreck... the trough of the sea may be observed, which was probably 150 feet from crest to crest"...

They arrived at Direction Island and signalled the Naval Board with their findings, and as hoped were directed to return to Fremantle. The weather was still poor and because of this factor it was not until the Sunday that they got underway for the return voyage. They endured four days of hard slogging at economical speed into the south east trades, making good about 5 knots, but after this the speed increased

to about 6 _ knots. On the eighth day they ran into a full gale and on the next day it was realised that the depleted coal stocks would not allow the vessel to make Fremantle. Course was altered for Geraldton, arriving at 3pm on 2 December with one ton of coal remaining on board. They took in 43 tons of coal and steaming at full speed against a strong southerly wind reached Fremantle at 1.15pm on Saturday 4 December 1914. According to Patrick Weir's report, they consumed 1 ton of coal to 9.6 miles on the return voyage against the 1 ton to 17.6 miles on the outward leg. The outward leg was of course, wind assisted.

Considering the facts, and with the benefit of 20/20 hindsight, it would seem somewhat ambitious to have sent *Protector* on such a mission as was originally planned. Her original engine power of 1500 horsepower would have been somewhat diminished by time, she was 31 years old, was manned in the main by unexperienced but enthusiastic reservists and was not adequately supported in regards to coal and water. In my view Patrick Weir was quite correct in voicing his objections and circumstances proved him right.

As a footnote, a visitor to North Keeling Island reported in 1919 that almost all traces of *Emden* has disappeared.

NOTES

- 1 Navy Office minute N18/0402 of 10 July 1918.
- 2 G.L. Macandie "Genesis of the RAN", pp
- 3 HMS *Cadmus* report dated 2 December 1914 contained in AA file MP472/1 Item 16/16/1845
- 4 HMAS *Protector* letter dated 4 December 1915 contained in AA file MP472/1 Item 16/16/1845
- 5 HMAS *Protector* letter dated 4 December 1915
- 6 Navy Office file 15/2323
- 7 Navy Office minute 15/2323 of 27 April 1915
- 8 Commonwealth Gazettes of 1915 at pp 822, 909, 945, 1005 & 1059
- 9 Naval Board minute of 25 June 1915
- 10 Prime Ministers letter 15/4006 dated 23 August 1915
- 11 HMAS *Protector* letter dated 16 October 1915
- 12 DNO Fremantle telegram timed at 1530 on 18 October 1915
- 13 HMAS *Protector* letter of 4 December 1915
- 14 Contained in AA file MP472/1 Item 16/16/1845

About the Author

Robin Pennock has been a regular contributor to the Journal of the ANI, especially in its earlier years.

Since his retirement from the RAN he and Lieutenant Commander Stephen Jeisman RAN(Rtd) have spent much time researching the history of the Colonial Naval Force and of the RAN in South Australia.

With the recent award of a Grant-in-Aid from the Australian War Memorial, Robin Pennock is continuing his research into the Colonial Cruiser *Protector* and hopes to publish a definitive work in the not too distant future.



The Battle of Yalu¹

by Graham Wilson

As Japan modernised under the Meiji Restoration and developed her industrial and military power; it became fairly clear that the possibility of conflict with China and Russia became stronger. These two nations were blocking Japan's attempt to become a modern great power with overseas possessions and spheres of influence. The challenge to China came first with the breakdown of civil order in Korea and Japan's opportunity to intervene. Korea was a semi-independent vassal state of the old Chinese Empire.

The Battle of the Yalu, the key battle of the Sino-Japanese war of 1894-95, was the first fleet action since the Austro-Italian battle at Lissa in 1866 and the first battle of the modern era. Perhaps it is ironic that the Japanese fought the first large battle of ocean going, steam-propelled, armoured battle fleets just over a century ago, and with the death of the giant *Yamato* at the end of World War II, they fought the last. The era had lasted fifty years. Fifty years later again the last of their type are laid up and unlikely to ever see further service.

The position of the Chinese fleet in 1894 was almost the reverse of the Japanese one. China had concentrated on equipment but their training was much inferior. Corruption was rife at all levels of the administration so that a large percentage of their ammunition was defective, the engines corroding and the crews amateurish. Sometimes shells were filled with sawdust or sand instead of cordite. Just before the war with Japan, the Dowager Empress appropriated twelve (or 40?) million dollars (US) of naval funds to build an ornamental pier in the gardens of the summer palace. It was in the shape of a two-decker man-of-war. (The contemporary US warships *Oregon* and *Brooklyn* cost about three million each).

The Chinese Navy was divided into four fleets, but in this case only the Northern Fleet, the one Li Hung-Chang², official administrator in the Chinese government, had spent so much time equipping, was involved. This was where the strength of the Chinese Navy lay, and the Japanese knew it was the key to the war.

The Southern Fleet had been destroyed during the war with France in 1884. The conflict had more to do with France's internal politics than with China but it raged in Indo China for some time. Finally Rear Admiral Courbet was sent on a punitive expedition. He sailed past the Foochow forts posing as a friend and then blandly announced to the Chinese commander that it was war. The Chinese fleet was ancient by all naval standards and the fight was hopeless.

The most modern unit was a composite cruiser, *Yonoi*, then six wooden sloops, two A.M.C.s, two gunboats, seven spar-torpedo launches and some junks. After two days of talks, Courbet ordered the Chinese fleet sunk. His flagship the *Volta* opened fire, followed by his other major units, *Dougay Trouin*, *Suffren* and *Tonnant*. The whole action was over in seven minutes. The only interest it created outside of China was that *Yonoi* was sunk by an automotive torpedo, one of the first successes for the new weapon.

France moved operations to Formosa where they managed to seize Keelung after bombarding the forts. The Japanese sent Captain Heihachiro Togo, the future victor of Tsushima, down to examine the effects of the bombardment and he was shown over the fortress by a young French Army Lieutenant, the future defender of Paris, Joffre.

In the northern fleet, Li often pitted his European advisers against each other which led to considerable frustration and frequently they resigned at the constant provocation. He also ignored their advice. A German officer recommended Kiachow Bay be made the fleet base. Li chose the exposed Wei-Hai-Wei instead and then the vulnerable Port Arthur. Finally he chose a cavalry officer, Ting Juchlang as his Admiral.

A greater loss to China occurred subsequently. Admiral Ting had run his ship aground and was absent from the fleet. His chief adviser was Captain W.M. Lang R.N. (Long?) and although Lang was second in command, Ting generally followed his directions. While Ting was away the next senior Chinese officer hoisted the senior officer pennant. Lang objected, and when no apology was received, resigned. Ting was left without his major crutch just when he needed it most.

Ting himself was not a naval officer, but a brave man who knew little about naval warfare and the Japanese knew this.

The Action off Asan

In Korea a quasi-religious group of fanatical extremists, the Tong-haks, were making the country ungovernable. Japan took the opportunity to intervene. China sent two thousand men to help their tributary state and notified Japan at the same time. In Japan, Prime Minister Ito contemplated war, but it was a great risk, especially with Russia behind the scenes. He asked his military council for advice and they decided against it. However Admiral Kabayama and General Kawakami stormed out of the meeting



and went straight to Ito and told him the council supported the war. It was sometime before Ito found out the council's true opinion and by then he was committed to conflict.

Japan dispatched an army brigade to Chemulpo in eight ships with the protected cruiser *Naniwa* under Captain Togo, as escort. They arrived safely on 25 June 1894. On the return voyage *Naniwa* nervously passed the Chinese battleship *Ting Yuen* and armoured cruiser *Ping Yuen*. Against these odds, *Naniwa's* and Togo's careers might have been glorious but brief.

Japanese troops seized the capital Seoul on July 20, and gave an ultimatum to China to leave Korea. On July 23 a flying squadron of protected cruisers under Vice Admiral Tsuboi Kozo in the *Yoshino* with *Akitsushiu* and *Naniwa* sailed from Sasebo with orders to stop the Chinese reinforcing the troops in Asan. This operation failed as the Chinese ships had arrived before the Flying Squadron was in position.

At this point neither *Ting* nor his Japanese opposite number Vice Admiral Sukenori Ito had acted decisively. *Ting* split his force and sent only the elderly protected cruiser, *Tsi-Yuen* and the sloop *Kwang Yi* as escort for the troops. This was too weak an escort to survive a determined Japanese attack, but too valuable to just throw away. The Japanese however sent only three cruisers to stop them. If *Ting* had sent his battleships, the Japanese might well have lost the cruisers and the war before it had really started.

The two forces met off the coast of Asan early in the morning. As no war had been declared they passed each other quite slowly. An over excited lookout shouted that he saw a torpedo track. Togo was not above sending his country to war and opened fire. It was 7.52 a.m. and the range 3,000 metres. The Chinese replied even before the Japanese shells arrived, so quickly that the other Japanese ships thought the Chinese fired first. Their ships were on a converging course and in spite of the mist, fog and smoke, only the large number of duds amongst the Japanese ammunition saved the Chinese ship being instantly sunk. The bridge was hit and only the captain survived. The steering gear was knocked out so the Chinese vessel careered about erratically and disappeared into the fog. The *Kwang Yi* appeared and seemed to be about to ram the *Yoshino*, so that Tsuboi had to take avoiding action. The *Kwang Ki* too disappeared into the fog.

Tsi Yuen then reappeared flying a white flag over the Japanese and Chinese ensigns. However her steering gear was restored and she decided not to surrender and disappeared back into the fog. *Yoshino* gave chase but Tsuboi soon gave up, as he worried about falling in with the Chinese heavy units. Back at the scene of the fight *Kwang Yi* reappeared abeam of the *Naniwa* and there was another exchange. *Akitsushiu* pursued

her into the fog until the Chinese craft piled up on the beach.

Naniwa left alone, sighted two more ships. One was the sloop *Tsao Kiang* that quickly fled. (Some sources claim that she was captured shortly afterwards) The other was more dangerous, the 1,300 ton *Kowshing*, a steamer of the Indochine S.N. Co. which flew the British red duster. Togo signaled J.W., "stop engines!" Then L.P., "anchor!" The *Kowshing* obeyed and Togo closed and sent a boarding party to the vessel. The Captain, Thomas Ryder Galsworthy and most of his officers were British, the rest apart from the Prussian Major von Hannekan, were Chinese. Galsworthy protested that there was no war, but the action earlier that morning put him on shaky ground. In addition aboard his ship were several thousand Chinese troops, fourteen field guns and a load of ammunition. Togo ordered the ship to follow him, but the Chinese mutinied and threatened to shoot the English Officers. Death was preferable to surrender. Togo then gave the signal M.L., "quit the ship immediately!"

Togo's problem was that a few thousand Chinese troops was unlikely to affect the course of the war, but the enmity of Great Britain might. If he did the wrong thing it might cost him his life. At 1.10 p.m. he fired a torpedo which missed, but the shells from his main battery didn't. Galsworthy and his officers dived overboard and were rescued, but then the Japanese fired on the Chinese struggling in the water. Two lifeboats were sunk and many soldiers killed. A few, including von Hannekan made it to the shore, where they were rescued the following day by the French gunboat, *Lion*.

In London the jingoists rallied, but wisdom prevailed and Togo was justified. Overnight the boy from Kagoshima was an international figure. Japan wiped out the Chinese force in Korea and on March 1 the Mikado declared war.

Battle of the Yalu

After the action off Asan, *Ting* prepared his ships for battle. All unnecessary fittings, boats, and light armour shields were removed. But he could not sail as the bureaucrats in Peking were exercising such tight control that he was virtually forced to stay in Wei-Hai-Wei. Li only wanted to defend Peking although for a while *Ting* did sail up and down within his narrow cage seeking battle. On August 10 Ito sailed past and bombarded the forts but *Ting* did not move. Finally he was allowed to operate west of a line between Shantung and the mouth of the Yalu.

On September 15 the Chinese fleet coaled at Talien Bay and moved out to escort a convoy to the mouth of the Yalu. The Japanese had sailed on the 10th to escort a convoy to Caroline Bay after which they made a sweep into the Yellow Sea. In the Yalu, *Ting* sighted



smoke and to avoid being caught at anchor, sailed immediately. It was September 17 and the Japanese had sighted the huge mushroom of smoke of the Chinese fleet. The battle of the Haiyang Yalu was underway.

The Japanese fleet advanced in line ahead formation, with a flying squadron of four ships in the van and the main body of six units behind. Tsuboi led the flying squadron in the fast *Yoshino* with *Takachiho* (commanded by a young Captain Kamimura who was to become famous in the War against Russia), *Akitsushiu* and *Naniwa*. The main body of larger protected cruisers was led by flagship *Matsushima*, and then the small armoured cruiser *Chiyoda*, followed by *Itsukushima*, *Hashidate*, *Hiei* and *Fuso*. Slightly astern of the main body was the small gunboat *Akagi*, and the armed merchant ship *Saikyo* which flew the flag of Vice Admiral Kabayama, Chief of Naval Staff. This personage should not have been present at all, and if he had to be present should have been aboard one of the cruisers. The fleet steamed in a northeasterly direction across the line of advance of the Chinese squadron at a speed of about fourteen knots. This rate of advance was to break up the Japanese line as the *Hiei*, an elderly armoured corvette, was capable of only ten or eleven knots under good conditions, and usually held its place in the line by cutting corners whenever the fleet turned. It was to do the same today.

The Chinese fleet advanced in line abreast, roughly speaking, as there was very little line about it. In the middle of the line was Admiral Ting's flagship, *Ting Yuen*, with the other Chinese battleship *Chen Yuen* commanded by a Commodore Lin with an American naval officer Philo McGiffen as executive officer. Outboard of the two battleships were the oddly designed armoured cruisers *Lai-Yuen* and *King-Yuen*. Outboard again were the fast protected cruisers *Ching-Yuen* and *Chih-Yuen*. Further out, on the right were the sloops *Chao-Yuen* and *Yang-Wei*, while on the left flank was the sloop *Kwang Kai* and the old protected cruiser and veteran of Asan, the *Tsi-Yuen*. The Chinese fleet speed was about six knots.

Much speculation has arisen as to why Ting adopted this particular formation. H.W. Wilson thought it was a misreading of the tactics of the Battle of Lissa in 1886, but such a formation would have required the flanks to have been strengthened at least to the point of placing the armoured cruisers on the wings.³ Others speculate the his training under the English had taught him to approach action in line-abreast, but had not taught him how to exploit it after action was joined. Third it might have been a totally random formation caused by the position of the various ships in the harbour when the order came to sail immediately. Or it might have been a cavalry formation!

The Japanese decided to attack the right flank of the Chinese fleet which meant they had to sail across the

bows of the advancing Chinese squadron at a range of less than 6,000 yards. The move designed to cut off the retreat of the Chinese fleet to Port Arthur was a risk. As the Japanese crossed the Chinese line, the battleships opened fire. The *Ying Yuen*'s captain, Liu Pu-chlan fired without warning his admiral or William Tyler, the British executive officer. The two men standing on an open bridge were knocked unconscious by the concussion. In panic, Liu forgot to command the fleet. The range shortened and *Yoshino* was bracketed by Chinese shells. A hit by the battleship would have put the *Yoshino* out of action and thrown the Japanese line into confusion.

For a time fortune favoured the Japanese and no hits were scored on their ships. At 1.05 p.m. Tsuboi closed to within 3,000 yards of the Chinese right flank and opened fire on the two sloops, *Yang-Wei* and *Chao Yung*. The effect of the QF guns was immediate and the rapid flow of shells devastated the fancy wooden upper works of the elderly vessels.

Ito's plan was for the advanced flying squadron to turn to starboard and run down behind the main Chinese body. However at this moment he was distracted by a new enemy coming from the North. Ting had sailed so hurriedly that he left a number of warships in the Yalu River and these now entered the battle. The most powerful unit in this force was the armoured cruiser *Ping Yuen*, supported by the sloop *Kwang Ping* and a handful of torpedo boats. These later vessels were to play a bigger role on Ito's mind than they were in battle.

Tsuboi swung away to port leaving the two sloops ablaze. His squadron was well committed to the turn when Ito recalled him and ordered the Flying Squadron to follow the main body which was on the course which Ito had originally intended the Flying Squadron to take, that is running around astern of the Chinese line.

However all was not well in the Japanese line. *Hiei* could not keep up and wisely allowed *Fuso* to "play through". However the Chinese advance was sufficiently fast to cut off the *Hiei*, *Akagi* and *Saikyo*. Tsuboi was therefore directed to the Chinese front to protect the isolated vessels. This movement took some time to execute and meanwhile the *Hiei* faced the choice of retreating or taking a short cut through the centre of the Chinese fleet. Naturally the Japanese vessel chose the later course and crashed through the Chinese line between *Ting Yuen* and *King-Yuen*, a gap of less than half a mile. At that distance even the defective Chinese ammunition could score hits and the *Hiei* staggered under an enormous battering. The small *Akagi* advanced to her assistance and shells and torpedoes were flying wildly. Eventually with her captain Sukamoto killed, the *Akagi* turned away and retreated. The cruiser *Lai Yuen* and two smaller vessels pursued her, till a lucky shell started a spectacular if not dangerous fire on the large Chinese vessel and the others went to her aid.



On the Chinese right flank, the two sloops that had been battered by the flying squadron and the main body in turn, were still afloat. This showed that the standard of Japanese gunnery was no better than the Chinese, but their QF guns enabled them to fire more shells. The two sloops proved an attraction to the *Saikyo* that hastened to give them the coup-de-grace. *Chang-Yang* collapsed under the fire and *Yang-Wei* ran herself ashore on Talu Island.

The lack of order in the Chinese line gave the *Ting-Yuen* a clear view of the large merchant ship and a hit from the battleship knocked out the steering gear of the Japanese vessel. Sawdust was just as good as cordite for that. The *Saikyo* now careered uncontrollably between the last and second last ships of the line. The Flying Squadron pressed on to protect the *Akagi*, but *Saikyo* now fell in with the Chinese force that had been left behind. *Saikyo* only just managed to get her steering gear back into some sort of working order in time to avoid a very determined torpedo attack.

On the left flank of the Chinese line there was activity of a different kind. The captain of the *Kwang Kai* panicked, fled and ran his ship aground. Captain Fang Paich'ien of the *Tsi Yuen* temporarily lost his head and fled to Port Arthur wherein the local governor made the situation permanent.

The Chinese fleet was therefore surrounded as it slowly edged its way to safety. Ito closed the range but his flagship *Matsushima* nearly hit the *Yoshino* with an over. The Chinese flagship *Ting-Yuen* was suffering badly, but here Ting's older advisor came into his own. The Prussian, von Hannekan may have known nothing about naval warfare, but he knew a great deal about forts, floating or otherwise. He organised damage control parties that fought the fires, and maintained teams of sailors to keep supplies of ammunition up to the guns. Aboard the *Chen-Yuen* Commodore Lin lost his nerve and McGiffen took command. He ordered the *Chen-Yuen* to manoeuvre as if out of control and attract the Japanese. Ito closed in for the kill and *Chen-Yuen* surprised them with 12in fire. He managed to hit *Matsushima* with a heavy shell, that for once was loaded with explosive. The shell hit a barbette, dismounted the gun, knocked out the 12.6in gun, exploded the ready use ammunition and killed or wounded eighty of the crew. Only the courage of two marines prevented a major magazine explosion. *Matsushima* was out of the fight. Flying sand from an eight hundred pound shell flayed a Japanese lookout alive. Ito pulled his damaged ship out of the line, transferred his flag to a TB and moved to the *Hashidate*. But the fleet had lost momentum.

McGiffen had only one tactic in mind, to keep the two battleships together. This rather negative action probably saved both ships.

Ito had missed the chance to charge the enemy fleet and when night fell his fear of torpedo attacks allowed the enemy to escape. McGiffen was astounded by this action, as his ship was effectively out of ammunition and possibly could have been seized by boarders. Morning found the remains of the Chinese fleet behind the forts of Port Arthur.

There is no doubt that the battle of the Yalu was a Japanese victory. China lost one armoured cruiser, *King Yuen*, which was holed when she attacked Tsuboi's ships without adequate support, a light cruiser *Chih-Yuen* which was overwhelmed when she attacked *Yoshino* during the incident with the *Saikyo*'s damaged steering gear, and three sloops. Japan had the *Matsushima*, *Hiei*, *Saikyo* and *Akagi* all heavily damaged, but none of them were sunk and all lived for another day.

The Rising Sun was now clearly seen over the horizon, but the shipwrights in Port Arthur were making certain that the war was far from finished.

The battle of the Yalu was the first major naval battle of the modern era. Experts studied it closely. The guns had worked well, the effectiveness of armour surprised them, but the failure of the torpedoes was noted. The *Ting Yuen* had been hit more than two hundred times and set on fire, but had only seventeen killed and thirty-eight wounded. The *Chen Yuen* suffered more than one hundred and fifty hits with thirteen killed and twenty-eight wounded. Most of the hits were from small or medium calibre shells. The Japanese three largest protected cruisers each mounted only one heavy 12.5in gun. It surprised the experts even more that the battle had stopped as both sides effectively ran out of ammunition.

Wei-Hai-Wei

In Korea, after the battle at Ping Yang, Field Marshall Yamagata Aritomo advanced to the Yalu River. On September 19, two days after the sea battle, *Naniwa* and *Akitsushiu* found the *Kwang Yi* still aground in Talien Bay and blew her up.

The presence of the Chinese Fleet in Port Arthur made it essential to take that port, consequently the Japanese 2nd Army was shipped from Japan to Hus-Yuan-kon, (Flower Garden Port) eighty-five miles from Port Arthur. They landed on October 24, the same day as the army in Korea forced the Yalu River.

The Chinese defence was not well organised and that allowed the Japanese to cross a narrow neck of land and fall upon Talien, the third major naval base in the Yellow Sea area. The full Japanese fleet (except for *Naniwa*) crept into the harbour at 6 a.m. on November 7 to support a combined attack by the land forces. There was silence; the great forts built by von Hannekan were empty.



However in Port Arthur, Admiral Ting saw his chance and sailed to Wei-Hai-Wei on the other side of the Yellow Sea reducing the whole Japanese operation on the Peninsula to a pointless sideshow. Togo was not to make the same mistake in 1904. McGiffen was not with them. Chaffing at Li's unreasonable controls he slipped away and boarded the USS *Monacacy*.⁴ Relentlessly the army pushed forward and November 21 the fortress of Port Arthur fell. Now for the first time European Powers realised that Japan had arrived as a military power. But the escape of the fleet meant that a new operation had to be mounted quickly against Wei-Hai-Wei as peace moves were already underway.

Wei-Hai-Wei was the second most important Chinese naval base in the Yellow Sea after Port Arthur. In a way it was more difficult to attack than Port Arthur as the powerful shore batteries of rifled artillery made a direct attack impossible and there were mines and a boom. It needed another combined operation. But here the most important of the batteries were on the high Liu Kung Island in the middle of the bay, which was difficult to assault from the sea and from the land was protected by the Chinese battleships. Still the combined operation went ahead.

Inside the bay Ting had his battleship the *Ting Yuen*, two armoured cruisers, the protected cruisers *Chin Yuen* and *Tsi Yuen*, *Kwang Ping* and some gunboats and torpedo boats. The *Chen Yuen* had run aground as the fleet entered the harbour, but she was still protected by forts and was in a good position to use her guns.

The Japanese operation began with a diversionary attack on Tungchow on January 18 and then the main assault at Yung Ching Bay on January 20. The Japanese were now only thirty five miles from Wei-Hai-Wei and although it was mid winter they expected the whole operation to be complete in about a fortnight.

Ito sent Ting a letter offering him sanctuary in Japan pointing out how corruption, pacifism and government by men of letters had destroyed the state he fought for. The government was rotten. Ting did not need Ito to tell him that, but he declined the offer.

January 30 an all day assault on the southeastern forts led to their capture. *Naniwa*, *Akitsuhiu* and *Katsuragi* bombarded the forts and caused the large Chao-per-tsui Fort to be evacuated hurriedly when a shell found its way into the magazine. More seriously from the Chinese point of view was the fact that internal bickering led to the capture of the guns intact. The Japanese army now hurried around the coast to capture the western forts. This time Ting took a hand and sent landing parties to spike the guns in the forts while fire from the fleet helped slow up the Japanese movements.

On the night of January 31 Ito attacked with torpedo boats, but the army had not been informed and the newly seized forts drove off the attackers. February 1 saw the start of a weeklong blizzard under the cover of which Ting's raiding parties completed the destruction of the western forts. Ito was unwilling to risk his valuable ships so he stood out to sea and fired constantly at the forts with his heaviest guns. However the sheer stone cliffs of Liu Kung Island proved impregnable. The next torpedo boat attack failed to find the gap in the boom till after daylight and the attack was abandoned.

The climax came on the night of February 5. Togo led four torpedo boats into the west channel for a diversionary action. Ten other boats came in from the eastern side. A storm blew up, but no one cancelled the attack. Three men froze to death at their posts. The torpedo boats surfed into the harbour but two of them finished up on the rocks and were lost. Searchlights were switched on and every gun in the Chinese fleet opened fire. Three of the boats were put out of action, a fourth had their torpedoes frozen into their tubes, but the other four fired with great success. *Ting Yuen* was struck in the stern and settled onto the rocks, but her guns were still in action. *Lai Yuen* was hit and turned over, trapping many of her crew inside. Death won the race with rescue. *Ching Yuen* was hit and disabled but her guns could still fire. Only *Chen Yuen* was untouched and she was already damaged.

On February 7 the tiny island fort of Yih was finally blasted into submission. Later that night the Chinese made an effort to save their torpedo boats. Twelve or thirteen made a rush for Chefoo. The Flying Squadron went in pursuit and only two of the Chinese boats managed to escape. The rest were sunk, run aground or captured. But the luck was not all one way. The shore batteries struck out and *Matsushima*, *Yoshino* and *Naniwa* were all hit and damaged. Two days later *Ching Yuen* was hit by a shell from the shore and finally sank. But by way of retaliation the battleship *Chen Yuen* hit the *Itsukushima* with a heavy shell which proved to be a dud.

The firing ceased on February 11 when the small gunboat *Chin Pet* steamed out under a flag of truce. Ting offered to surrender if his men were allowed to leave, and they were given two or three days to do it. Ito accepted immediately and again offered Ting asylum. Both knew the grafters in Peking were treacherous. After making all the necessary preparations for the surrender Ting went to his cabin and took an overdose of opium. His flag captain and the commandant of Liu Kung did the same.

The Japanese paid Ting the tribute due a gallant soldier and admiral. The officers filed past, minute guns firing and flags at half-mast, the body was put aboard the captured *Tsi Yuen* and sent to Chefoo. In Peking the corrupt officials condemned to death all those that Ito had released.

The Conclusion

With Wei-Hai-Wei firmly under control and there being little likelihood of a Chinese push to retake it, the Japanese began operations in the Pescadores Islands in preparation for the seizure of Formosa. However before operations really got under way peace was declared.

Japan had arrived as a world power and China had been exposed as the corrupt paper tiger her government was. However not many European nations were happy about the new situation. Japan took from China, Formosa, Pescadores Islands, Korea, and the Lao Tung peninsula including the area around Port Arthur. In addition she kept Wei-Hai-Wei until such time as China paid the huge indemnity that was imposed. The navy was reinforced by the commissioning of the ex-Chinese vessels, including the battleship *Chen Yuen*, (*Ting Yuen* was too badly damaged to be worth salvaging) the armoured cruiser *Ping Yuen* and the old protected cruiser *Tsi Yuen*, the *Kwang Ping* and half a dozen old gunboats.

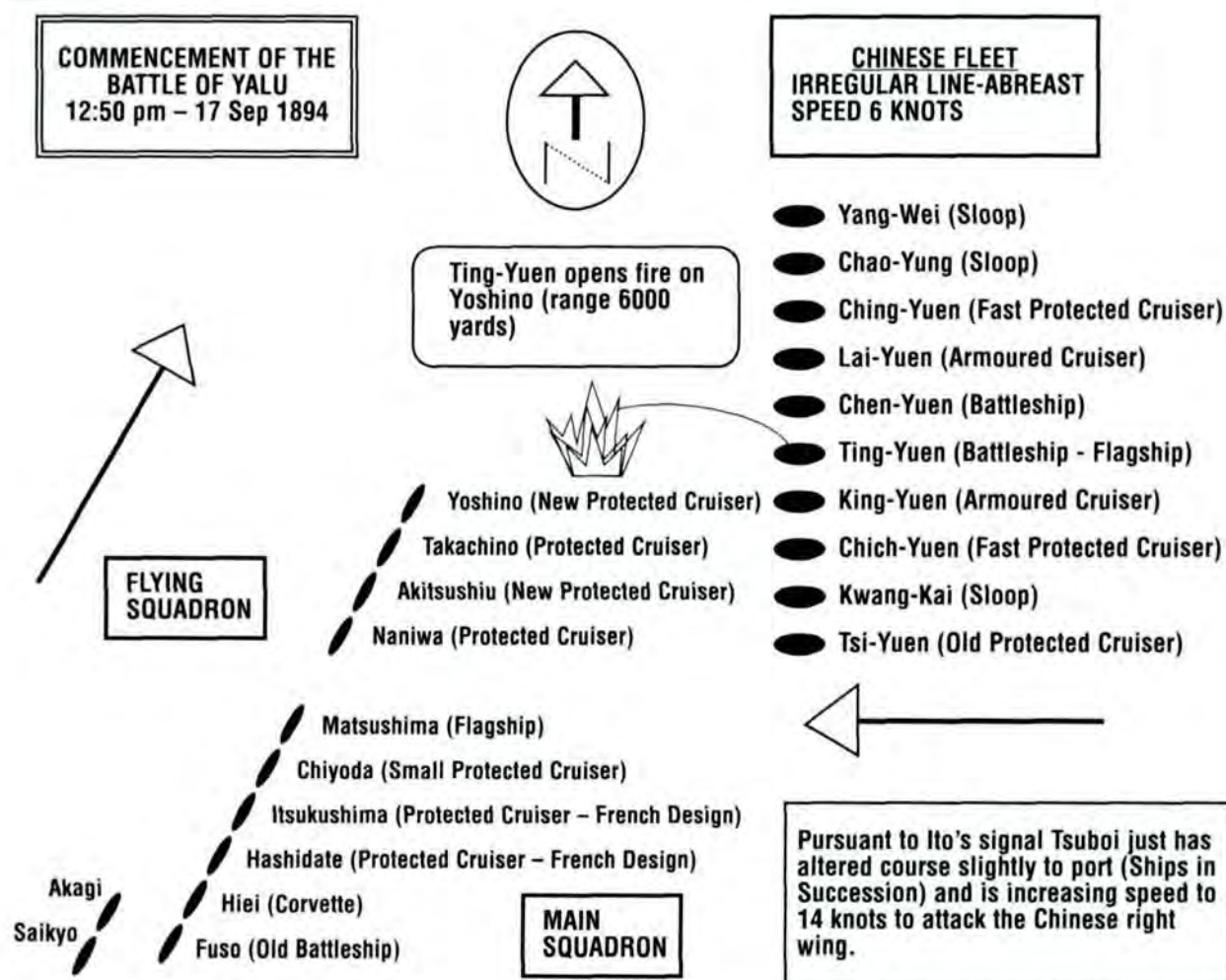
However Japan quickly found out that though she was the major Asian power she was still small by European standards. Russia, as she felt threatened for her interests and ambitions in Manchuria, Germany for no good reason and France, joined together to force Japan to give back much of her conquests. Korea was left independent. Port Arthur and the surrounding country was given up, while the Chinese paid the indemnity almost immediately and so Wei-Hai-Wei was lost as well. Nor did China gain any benefit from these transactions. Russia of course wanted rewards for her aid and took Port Arthur and gained permission to build a railway across Manchuria to Vladivostock and Port Arthur. Germany who realised how weak China was, took Kiachow Bay and gained special rights in Shantung. France took Kwangchow in the south. In a few years Japan would have the opportunity to redress much of this

misfortune. Britain too viewed Russia as potentially her most dangerous enemy, a constant threat to India. So Britain took Wei-Hai-Wei to keep an eye on the Russians. It was probably the most useless acquisition of the whole colonial period, and after the forts were built Captain Percy Scoot persuaded the Admiralty not to waste resources on installing the guns. It remained a pleasant summer resort for the China Station during the 20s and was returned to China in the 30s.

Japan now began to prepare for her next struggle, to be against Imperial Russia.⁵ The Battle of Yalu has joined one of the scarcely remembered actions that litter naval history. It remains an important step in the development of the technology of sea warfare and in the tradition of the P.L.A. Navy.⁶ It is viewed as the first attempt by the Chinese people to resist modern "Imperialism" in an organised way at sea. They understand the importance of developing a strong tradition and spirit in a naval service.

NOTES

- 1 Known to the Japanese as the Battle of Haiyang, but the rest of the world as the Battle of the Yalu.
- 2 The spelling of Chinese names in English has changed over the years and creates some confusion. Where possible in this text, the spelling used pre 1914 has been adhered to, as the principal text materials were from that era.
- 3 H.W. Wilson *Ironclads in Action* London 1896.
- 4 In later years he became depressed about his wounds and increasing poor health and took his own life on 11 February 1897.
- 5 Interesting sources include: H.W. Wilson *Ironclads in Action* London 1896; *Brassey's Naval Annual* 1896 Edition; Bruce Swanson: *Eighth Voyage of the Dragon* Annapolis 1982. (Just Brief); J.S. Rawlinson: *China's Struggle for Naval Development 1839-1895* Harvard UP; Cambridge USA 1967 (Appendix C pp. 246-259 lists all the Chinese War vessels in service during the period studied and explains the difficulties in determining the particular details of various ships); E. Falk *Togo* London 1936; John Lauder milk "I Fought at Yalu" *Naval History* Sept/Oct 1994 pp. 22-27 (Contains an excellent brief bibliography)
- 6 The Chinese made feature film of the battle was shown in Australia on SBS about 1980.





New Zealand's Defence Equipment Decisions

by Commander Richard Jackson, RNZN

In 1 December 1998, the New Zealand Government announced it would acquire 28 F-16 fighters for the RNZAF, spend \$500 million on the Army, but not order a third Anzac-class frigate for the RNZN. These decisions were made as the first step in implementing the 1997 Defence Assessment, which had laid out the long term capital plan for the NZDF. The cost of the new program is within that budgeted for the Defence assessment.

The full Cabinet decisions were:

- to reaffirm the policy set out in the 1997 White Paper,
- to make the main priority the re-equipping of the Army
- to study options for an early refit of the sea-lift ship *Charles Upham*
- to replace the A-4K fleet with 28 F-16A/Bs
- to not order a third Anzac-class frigate, but to defer a decision on how to replace HMNZS *Canterbury* until 2002.

The F-16 Option

The opportunity for New Zealand to acquire F-16s arose from the Indian-Pakistani nuclear tests. F-16s built for Pakistan and embargoed due to US opposition to that nation's nuclear program, were made available for sale after the nuclear explosions in 1998.

New Zealand has accepted 28 aircraft to be delivered in early 2001 under a lease arrangement, with an option to buy in 2010. It will cost some \$NZ 200 million to activate the aircraft with an annual leasing fee of \$NZ 12.5 million. According to the Minister of Defence this represents a saving of \$NZ431 million compared with purchasing 'new' aircraft; implying that an outright purchase would have cost nearly \$NZ 800 million. The lease arrangement then reduces the current capital cost to the Defence budget and so removes some of the potential political heat.

More importantly for the RNZAF, they will at last get a contemporary fighter, after years of making do with the Skyhawks. The new aircraft, though built in 1989/90 have flown very few hours despite their chronological age. Ultimately, much will depend on what weapons the RNZAF acquires for the new fighters; armed with, say, the Harpoon, the F-16 could become a creditable maritime strike aircraft, but using only the RNZAF's current short-range Maverick, the fighter will be of limited value in the maritime scene.

A Third Frigate?

The Service that has lost most in the Defence debate is the RNZN, yet it is the one Service that most needs a long-term commitment to its force structure and equipment. Ironically, the 1997 White Paper explicitly committed the Government to a three frigate Navy, but the prospect of ordering a third Anzac frigate became a symbol for all those opposed to Defence spending.

In the 1998 Parliament, with many MPs unconstrained by party discipline, the Shipley government's ability to maintain power was too fragile for such an unpopular decision. Thus the overall political environment in Wellington became more and more hostile to the RNZN. By year's end the Cabinet decision only offered Naval Staff the distant prospect of revisiting the replacement frigate issue.

The Australian Reaction

Since the 1997 Defence White Paper, Canberra had eased off its pressure on Wellington to modernise the NZDF. However the decision to not order a third frigate took the RAN, and Tenix, by surprise; senior officials had thought that a very good offer to New Zealand had been 'sewn up'. In the corridors of Russell, New Zealand has now been 'written off' as a maritime nation; not that they have any doubts about the RNZN itself, rather they cannot see the political will (one of Mahan's original elements of Seapower) ever rebuilding to support an adequate Navy. Whether that attitude will colour the promised review of a replacement frigate in 2002 remains to be seen; the NZ government will have to work hard to rebuild its credibility if it is to regain the same generous consideration that went into the 1998 frigate offer.



In the longer term, it is likely that the RNZN will argue that to replace *Canterbury* with a ship different from the Anzac class then it will be necessary to buy two second hand ships of one class. This means that ex-American FFG-7s may well come back into consideration before the next decision is due in 2002.

However, the arrival of F-16s in New Zealand should please the RAAF. For dissimilar air combat manoeuvring the F/A-18s will have a worthy opponent, while the new fighters will give the RNZAF some compatibility with regional air forces, many of which are already experienced F-16 operators.

Conclusion

The New Zealand experience in 1998 shows the perils of Defence decision making in a complacent democracy. Since New Zealand's parliament appears to have no long-term vision, they have down-played the future value of warships to an island nation entering an uncertain new Century. The political debate in New Zealand focussed exclusively on hardware, blinding the public to the actual uses of armed force in the contemporary world. Kofi Annan's remarks on the value of diplomacy backed by adequate armed force (made after one of last year's Iraq weapons inspection crises) seem to have been lost on New Zealand's policy makers.

President's Report to the Annual General Meeting of the Australian Naval Institute 18 February 1999

I regret to report that our overall performance, measured against our principal objectives, has been poor. Although we have made improvement in the overall content of the Journal we missed an edition due to lack of material; were late with the last edition; and have still an unacceptable rate of editorial errors. We also failed to raise the number of members.

I would like to address each of these areas of poor performance before moving on to those in which we have achieved more positive outcomes.

Journal

Following a suggestion made at the last AGM we moved to establishing a theme for each issue of the Journal. The theme chosen for the first such issue was "The Knowledge Edge", this being the area identified as being of highest strategic priority in ASP97. Despite the importance of the subject the response was very disappointing and, as you are all aware, we failed to publish that issue of the Journal due to a lack of suitable material (including general articles unrelated to the theme). I wrote to members explaining the situation and the Council extended all memberships by three months to compensate for this loss of service.

As a result of this experience we increased our efforts to solicit articles for the following issues. This has been a learning experience and I believe that our efforts have been better targeted and achieved a better spread for each subsequent issue. The first evidence of this was the number of original articles in the last issue of the Journal on "The Human Element of Capability".

We have not restricted ourselves to Service sources; for the last issue we sought input from both the RSL and ArFFA. The next issue will be on Amphibious Warfare and the one after that will be on the future of the surface combatant. For the latter issue one I wrote 17 letters to a wide range of individuals and authorities, including DEPSEC S&I, Mr Hugh White; Mr Ken Harris of ADI; and Mr Andrew Johnson of TENIX. Feedback that I have received from the first two indicates that both intend to contribute. I am confident that issue will reach the benchmark standard for content that I believe we should be aiming for with the Journal.

We created an editorial sub-committee, which has not been used properly to date. However, following the

last issue of the Journal, which contained an unacceptable number of editorial errors we have instituted a mandatory regime of putting copy through this sub-committee. I believe that, combined with our efforts to get ahead of the game in soliciting articles (we are now working two issues in advance), this should produce a marked improvement for future issues.

The situation will also be assisted by the fact that the Editor is now out of the Minister's office and into a more normal job at ADFA. This should provide a more stable working environment in which he can plan his work with greater certainty. The Editor has investigated and initiated a number of steps to reduce the costs of producing the Journal, which have eased the pressure on the budget.

Membership

We considered a membership drive last year based around an incentive offer to our existing members to recruit new members. This was to consist of a reduction in their subscription for each additional member they managed to sign up. Unfortunately uncertain financial projections delayed consideration of that initiative and it remains on the books, to be looked at as soon our modelling is complete.

Friends

I have recently written to our four corporate sponsors, or Friends of the ANI, advising of a new sponsorship package which includes the Internet site, which I will address shortly, and advertising options for the Journal. We have received a positive response from Mr Steve Youll of LOPAC and encouraging signs from the other three.

We are planning a dinner for our current Friends and to target potential new ones. We are working on a list of potential contenders to approach and a suitable date in the second quarter of the year. The intention is to invite some of our currently serving flag officers, including CN, to share the evening and assist in promoting the Institute and its objectives.

Internet Site

Thanks principally to the efforts of Midshipman Robin Bowley, who was at ADFA last year, we have developed what I believe to be an excellent home page for the Institute. It is currently hosted on the



Defence Intranet for development purposes, but will shortly be hosted on the Internet. Apart from doing an excellent job of designing the site Midshipman Bowley has established a practical means of keeping the site current through the Midshipmen undertaking computing courses at ADFA.

The site will initially be a static one; that is, it will not include a bulletin board or a "chat room". These require close to fulltime manning and impose obligations with respect to improper or defamatory remarks. In addition to information on the Institute the site will include the contents pages and Editorials from the latest Journals. As part of the sponsorship package we have offered the Friends the ability to link from the ANI site to their corporate sites. We are also looking to link our site with that of the Navy and other kindred organisations, such as the US Naval Institute.

We will finally have an email post box for the Institute and in the future it should be possible to publish the Journal on the site and provide cheaper subscriptions. However, I think we need to learn to walk first and prove that we can successfully maintain the site as presently conceived. Our previous Internet site could not be sustained because it relied on the commitment and availability of one person. In some respects establishing the site is the easy part, managing it in a dynamic manner over a prolonged period will be the challenge.

I believe, though, that this is a very important initiative for the future of the Institute. Most importantly it gets us into the fastest growing information medium and provides a future growth path. It also provides a more modern image of the Institute that will hopefully appeal to younger people and corporate sponsors.

Support to Staff Courses

We have continued to provide support to the RAN Staff College (RANSC) through the provision of medallions, and to the Senior Sailors' and Junior Officers' courses at HMAS *Creswell* through complimentary memberships and book prizes. Our relationship with RANSC will need to be renegotiated after collocation of the Service Staff Colleges.

Administration

On the administrative side we have validated the Constitution and updated our records with the Registrar General. We have established an improved system of files and processes for handling correspondence. We have archived a significant amount of early material and the ANI library continues to be maintained in the Defence library at Campbell Park.

Patron

Last year we discovered that we had omitted to request Sir Willaim Deane to become our Patron when he became Governor-General. Discussion in Council raised questions about the role of the Patron and what the position contributes. While the Governor-General is the Commander-in-Chief he does not play an active role in the Institute's activities nor offer any meaningful support. Following an examination of the options, and in accordance with the Constitution, the Council decided that the Chief of Navy would be a more appropriate choice and I have duly invited him to become our Patron. This decision recognises the very strong support that the present Chief of Navy has provided the Institute and the active role that he has played over the last twelve months. It also provides an appropriate formal role within the Institute for the Chief of Navy without compromising our independent status.

NZ Chapter

Another major issue considered recently by the Council has been arrangements with the New Zealand Chapter. Over the last couple of years changes in key personnel on both sides of the Tasman have led to some variations in practice compared with the originally agreed arrangements. In addition to initiating corrective action Council decided that it was appropriate to raise these arrangements as an item for discussion this year and see if there was any need, or desire to revise them. I would like to stress that this is with a view to initiating discussion on both sides of the Tasman and not with a view to any particular change.

It would seem to me that there is a range of alternatives, probably lying somewhere between the arrangements applicable to a Chapter here in Australia, and a semi-autonomous body paying for services received. While the former might seem an obvious choice it is very restrictive and, in my opinion, does not recognise the fact that this is a significant body of our membership who belong to a separate sovereign Navy. At the other end of the spectrum, semi-autonomous status might be dividing the Institute too much. For my part I favour an arrangement that acknowledges the sovereign status of the Royal New Zealand Navy and provides their members with a reasonable degree of autonomy to conduct their affairs.

I do not intend to pursue the matter further in this report. My intention is to initiate discussion of the issue, canvassing opinion on both sides of the Tasman with a view to considering a proposal at next year's AGM.



Challenges Remain

Substantial challenges remain, the principal ones being to improve the financial and membership base. We are facing strong competition from other organisations and publications (in a market that has possibly reached saturation) and we need to improve the service provided to our members. Our intention is to target new Friends through the dinner and revised sponsorship package; and to stimulate membership through the previously mentioned membership drive, an improved Journal, and, in due course, by reactivating the seminar program.

There is no doubt that in the post-DRP environment our people are carrying a heavier load and that they have less time to devote to the running of the Institute. I do not believe that it will be viable in the future to try and run the Institute without a dedicated, albeit part-time, staff member, preferably combining the roles of Editor and Office Manager. I believe that this is the only way to bring the operation of the Institute to an appropriately professional level and provide the required level of service to our members.

The issue of a part-time Office Manager has been discussed for a long time. In my opinion the time for discussion is long past and we should initiate action as soon as our finances permit. This will depend heavily upon attracting additional corporate sponsorship.

I am convinced there is a continuing role for the Institute. We live in a time of considerable change; change that is affecting almost every part of our professional lives. We need a forum where issues can be discussed and policy and ideas challenged. The ANI is the only such forum and we need to nurture and stimulate it.

Change of President

I have enjoyed my time as President and while the primary reason for me stepping aside is a move to Melbourne it may well be time for a change, for new ideas and a fresh perspective. I have no doubt that our new President, Commodore Brian Adams, who is presently Commandant of ADFA, will provide those new ideas and positive leadership to the Institute. I wish him, and the new Council, well.

I would like to conclude my report by thanking the office bearers and Councillors for their effort and assistance during the year. Notwithstanding that we did not achieve all that we set out to do they put in an excellent effort.

— Rear Admiral W.A.G. Dovers, RAN



A Force for all Seasons ... and all the right reasons

by LCDR John P Robinson, RAN

'...The fleet and the army acting in concert seem to be the natural bulwark of these Kingdoms.'
Thomas More Molyneux, *Conjunct Expeditions*
(1759)

'...Amphibious flexibility is the greatest strategic asset that a sea power possesses.' Captain Sir
Basil Liddell Hart, *Deterrence or Defence* (1960)

Introduction

As the 20th Century draws to a close, it is timely to reflect upon the involvement of the Australian Defence Force in world affairs and consider what form this involvement might take in the 21st Century. The need to maintain a large standing Army and strong Navy to primarily support campaigns overseas has been a major reality of the 20th Century. Involvement in two World Wars as well as a number of other regional conflicts since, have borne testament to the need to maintain such forces, which have in the main, been conventionally structured, and organised and trained along British Military lines. Whilst the maintenance of such forces were appropriate to meet the requirements of the time, it is worth remembering that such organisations had their genesis in the 19th century, if not earlier, and reflected the requirements of that period.

The realisation by a number of our allies that the requirement to use military force in the future has changed has brought about a fundamental change to their organisations and modus operandi. The end of the Cold War and greater stability in Europe has refocused attention on 'out of theatre' operations or expeditionary warfare. In the US and UK, force structures and the modus operandi, have been radically changed to reflect the need to have highly mobile forces available to react to a wide variety of contingencies, including peacekeeping and humanitarian aid. Indeed the focus has moved from the need to conduct warfare in a deliberate and ponderous manner, with large formations, to warfare conducted quickly by lightly equipped but highly mobile forces of all arms, able to react quickly and effectively to changing demands.

Whilst the ADF today has contracted in size from its former past, it nevertheless continues to reflect the structure and organisation of a much larger Force. This is particularly so within Army where there still

remains much hollowness, and whilst Army 21 and Restructuring the Army (RTA) have gone some way in attempting to redefine Army's future structure and role, they do not reflect the wider ADF modus operandi of the future. In a similar manner, the RAN since the end of World War 2 has continued to develop and acquire capabilities that are consistent with conventional Naval requirements but do not necessarily reflect the wider requirements of the ADF in the 21st Century. In this evolutionary process, the RAAF have also evolved from a fledgling Force in World War II to becoming a technologically advanced and multi-skilled Air Force within the Air World. The current range of roles undertaken by the RAAF is extensive but as we look ahead to the next century it will be vital that the future acquisition of high value aircraft takes account of all ADF requirements. The requirements for both fleet and ground support need to be clearly identified and must reflect the requirements of the ADF modus operandi of the 21st Century. The development therefore of all ADF capabilities for land, sea and air need to be so orchestrated that the capabilities are fully integrated to meet all anticipated ADF requirements.

Towards 2000

This paper suggests that the time has now come to reassess the way in which the ADF will go about its business in the future and examine what capabilities the Force will require. At the dawn of the 21st Century, Australia is faced with the challenge of co-existing and providing responsible leadership in a large, diverse and rapidly growing region, that is becoming increasingly unstable. A significant difficulty for Australian Defence Planners in recent years has been trying to identify the threat(s) to Australia. This continues to be the case and whilst there continues to be no immediate direct threat to Australia or its interests, there remains a plethora of potential indirect or direct threats that could quickly emerge within or beyond the region. In a region that is growing rapidly, the potential sources of conflict are many and such threats could arise quickly and pose a significant challenge to our Defence resources. There is therefore a need to prepare the ADF to undertake a wide range of roles and to be able to react quickly to the emergence of threats and to being able to adapt to changing requirements.

Strategic Policy

The publication of Australia's Strategic Policy (ASP97) in December 1997 determined a more forward looking defence posture for Australia and provided a template for the development of the ADF into the 21st century. In introducing the new strategic policy the then Minister for Defence, Ian McLachlan stated,

"Australia's Strategic Policy covers those aspects of the Government's security policy which relate to the use of armed force in International affairs. The judgements in it reflect the Governments conviction that to prosper in the very demanding environment now emerging in the Asia-Pacific region, Australia needs a strategic approach which takes full account of the new challenges we face. Moreover, Australia needs an approach, which explicitly reflects the full breadth of our security interests. Australia's strategic interests do not begin and end at our shoreline. The interests of future generations of Australians will not be served by encouraging an isolationist mentality at a time when international inter-dependencies are increasing. The security of Australia is, and should always remain, the paramount concern of our national strategic policy. Maintaining confidence in our ability to defeat an attack on Australia is, in a sense, the focus of all our defence activities. But obviously, developments in our region determine the possibility of Australia coming under military threat. It would be a serious miscalculation to think we could remain unconcerned behind some illusory 'fortress Australia' if the strategic environment in the Asia-Pacific were to deteriorate. Our aim must be a secure country in a secure region."

What is the region? The region is defined in ASP 97, as "the countries of East Asia, Southeast Asia, the South Pacific, the United States, and, perhaps increasingly in the future, South Asia." This littoral region is vast and comprises an enormous diversity of cultures and nationalities and is spread across several time zones and climates. It is the fastest growing region in the world and is the interface between burgeoning industrial and commercial development and old established cultures. Clearly, as the region continues to expand and economies grow there will be increasing pressure on diminishing resources, which will increase the risk of friction between competitors, at either the national or local level. Other pressures within the region include the establishment of democracy and independence in a number of countries. According to ASP 97 "The dynamism of the Asia-Pacific region makes our task more complex than it has been in the past. The pace of economic growth in our region presents a combination of opportunities and challenges. Our national approach

to the region must therefore have a number of elements which allow us both to exploit the opportunities and manage the risks presented to us."

An indication of the rate of growth that has occurred in the region in recent years is reflected in the modernisation of a number of regional military forces into well-equipped and balanced conventional forces, able to "monitor and protect offshore resources and interests". (Ibid) The recent purchase of an Aircraft Carrier (CHAKRI NARUEBET) by Thailand and the current building of three Amphibious Ships (LPD) by Singapore also represents a significant increase to capability.

ASP 97 notes that this strong rate of growth in defence spending is expected to continue over the coming decades which will "increase the capability of regional defence forces." Whilst both ASP 97 and the previous DOA strategic policy acknowledged that there was no obvious or immediate threat to Australia or its dependencies, clearly there is considerable potential for a conflict to arise within the region and at relatively short notice. National sovereignty issues, racial and religious disharmony, increased wealth and the emergence of democracy are all catalysts for conflict. Indonesia, Malaysia and PNG are but three of a number of countries within the region where such catalysts exist. Further afield, Burma, Cambodia, Korea and the South China Sea are all areas of potential concern.

As General Krulac, Commandant USMC noted "In the future, the United States is likely to face a number of very different threats to its security interests. Many of these will be associated with the littorals, those areas where land and sea meet. The great coastal cities, well-populated coasts, and the intersection of trade routes represent a relatively small portion of the worlds surface, yet provide homes to over three-quarters of the worlds population, locations for over 80 per cent of the worlds political capitals, and nearly all of the primary marketplaces for international trade. Because of this, the littorals are also the place where most of the world's important conflicts are likely to occur.

Geographic proximity with the littorals is one of the few things that conflicts of the future are likely to have in common. In all other respects – goals, organisations, armaments, and tactics – the warfare of the next 20 years will be distinguished by its great variety. For that reason, it is imperative that the Corps resist the temptation to prepare for only one type of conflict." (Operational Manoeuvre from the Sea: Building a Marine Corps for the 21st Century by Gen. Charles C Krulak)

This message is equally applicable to the ADF, where the recent economic downturn in the region has merely added to the list of potential destabilising factors. In preparing to respond adequately to any one



or more of the broad range of potential scenarios within the region, the ADF should now re-assess how it is configured and organised. The great imponderable in this critical self-assessment of defence capability are the judgements, based on intelligence and other factors that identify the threat or threats to Australia and its interests. A great difficulty for the ADF, in the post Vietnam War era has been to identify such threats and develop the necessary capabilities to counter them. Consequently, the ADF has continued to generally develop capabilities that reflect known or Single Service perceptions of what is important to the defence of Australia and which at times have been the source of some acrimony between the Services. The result has been the development of a wide range of defence capabilities, developed largely in isolation from each other and which are not sufficiently integrated to meet future ADF requirements and do not reflect a total force concept.

The Way Ahead

As we prepare to move into the 21st Century, it is timely to consider a better way of doing business and acquire a more holistic approach to the development of defence capabilities. A key factor in this process is to acknowledge that whilst Australia does not currently face an obvious threat, ASP 97 demands that we are prepared to deal effectively with any one or more of a range of potential threats emerging within the region, or beyond. This requires a high order of flexibility throughout the ADF in both the organisation, the command chain and in the planning process in order that an appropriate force can be assembled quickly and prepared for deployment to meet any given situation. The second key factor concerns Australia's unique geo-strategic situation within the region and its vast hinterland, with limited infrastructure. Equally vast, is the regional littoral area into which the ADF may be required to operate. The tyranny of distance between and within these vast areas requires a high level of mobility at both the strategic and tactical level across the ADF.

A cornerstone to this development is that recognition must now be given to the reality of Australia's geo-strategic situation as an island continent, set in a predominantly maritime environment, and that the future development of the ADF be based upon a maritime strategy. This will then reflect the significant change from the continental Defence posture that has dominated Australian defence development in the 20th Century but is no longer relevant to the 21st Century. The adoption of a maritime strategy does not place Navy in a pre-eminent position over the other two services but does recognise the extensive maritime nature of our surroundings and the need to develop a total force capability. Stewart Fraser, in his article on Littoral Warfare & Joint Maritime Operations noted that :

"Maritime strategy flows directly from a state's geo-strategic environment, and is formulated at national and grand strategic levels. At its broadest, it may be defined as the utilisation of national maritime – based power – military and civil – to meet political and economic objectives:

Maritime strategy is specifically concerned with the exercise of maritime power, as opposed to naval power. The difference is significant. Maritime power is inherently joint in nature. It emanates from forces drawn from all three services, both land and sea-based, supported by national and commercial resources, exercising influence over sea, land and air environments."

The reality of deploying and operating in this environment, in a flexible and mobile manner needs to be fully examined and all Defence capabilities need to be assessed for their worth in meeting these requirements. The adoption of a maritime strategy as the cornerstone of Australian Defence Policy and the development of integrated capabilities will ensure that the ADF is able to respond in an appropriate manner to a wide range of threats. This is analogous to the establishment of a Fire Brigade, which is equipped, trained and prepared for a wide variety of potential tasks. The nature of the task at the time will determine what resources are required, the secret to success being the ability to quickly judge what resources are required to deal effectively with the task and the speed of response. It will be vital for Australia's standing within the region in the future that any military response is seen to be effective. This does require the preparation of a Force that is well prepared to act quickly and robustly, like a Fire Brigade to any given situation and to have the inherent flexibility to adjust to a changing situation.

The establishment of a maritime strategy, as the cornerstone of Defence policy considerably enhances the ADF's ability to deploy within the region and would confer upon the ADF, an ability to maximise the land, sea and air space for manoeuvre. When the principles of mobility and flexibility are applied, the ADF will acquire a significant capability to remain responsive to changing circumstances and requirements within the region, including mainland Australia and the offshore territories. Dr Michael Evans noted that:

"In 1902, the great American naval strategist, Captain Alfred Thayer Mahan, wrote that Australia should base its security on its international position rather than its local geography. Mahan was writing about Australia at the beginning of a new century, in a time of growing strategic change and diplomatic uncertainty. 'Local safety', he observed, 'is not always found in local precaution. There is a military sense, in which it is true that he who loses his life shall save it.'"

On the edge of the twenty-first century Mahan's advice is still relevant. In the late 1990s, the imperatives of a new and unpredictable international security system are challenging current Australian concepts of strategy and defence planning. Nowhere is this more acute than in the Australian Army where, since the mid-1970s, a concentration on local or continental defence has been the predominant activity.¹ Ian McLachlan's comments in 1997 that of 'Australia's strategic interests do not begin and end at our shoreline' are consistent with Mahan's words from 1902.

The development of a Defence capability based upon a maritime strategy demands that the middle ground that lies between ASP 97 and the proposals contained in Restructuring the Australian Army (RTA) be fully evaluated. ASP 97 reflects a strong reliance on the protection of the Sea-Air gap with naval and air assets, with Army more or less confined to the defence of mainland Australia. RTA serves to compound the dichotomy between a navalist strategy and continental defence by proposing a force structure that is configured primarily for continental defence. Both



Soldiers from Alpha Company, 2 RAR LCM8 for beach assault. Exercise initial landing 99

ASP 97 and RTA therefore continue to perpetuate continental defence, which is at odds politically with our stated involvement within the region and strategically constrains the ADF by separating those forces assigned to continental defence from those concerned with the defence of the sea-air gap. The middle ground approach would acknowledge that the supposed Sea-Air gap, is in reality a Sea-Air-Land gap and that it is extensive. Under a developed maritime strategy, Army would play a full and vital part in this region as part of a joint force but would need to attain high levels of responsiveness and be equipped accordingly. The ADF as a relatively small force must be able to maximise its resources and become highly mobile in order to be effective against many potential threats, throughout the region. The approach must be thoroughly joint, with all elements of the ADF able to combine together, as and when required. As Dr Evans noted "This combination of

navalism and continentalism, it is suggested, may ultimately forfeit the advantages of employing a land force in maritime operations, namely strategic mobility, concentration, surprise and flexibility." Speed of response, an ability to respond to changing circumstances, the provision of highly mobile strategic and tactical transport assets, strong all arms firepower and sound communications would be the key ingredients. High levels of mobility at both the strategic and tactical level would however be the key factors to the effectiveness of such a Force. Such forces would be as capable of operating within the region as operating on mainland Australia and would deploy by sea or air or a combination of both.

To acquire such a capability the ADF would need to critically examine its force structure and levels of readiness. The development of such a Force would require that its key 'modus operandi' be established upon the concepts of Manoeuvre Warfare, conducted by lightly equipped, highly mobile forces able to be supported over long distances. These forces would be both airborne and amphibious capable, and would have the necessary integral mobility, firepower and logistic support necessary to sustain them. Equally, the development of such a Force would require that all future ADF capability development be predicated upon the war fighting requirements of this Force, as part of a Total Force requirement.

In simple terms this might translate for Army into the replacement of the current inventory of heavy armour with light armour, replacing or reducing medium artillery batteries with light artillery and increasing Army rotary aviation (utility and attack) whilst reducing the holdings of heavy transport. The latter would enable much of the mobility to be attained by helicopter through the conduct of airmobile operations from both land and sea.

The role of the RAAF as part of a 'total force' would not only require a review of current capability but also a considerable increase in the ability to support Naval and Army units in the Maritime environment. This might require the acquisition of additional or alternative combat aircraft capable of providing air defence to naval units throughout the region as well as close air support (CAIRS) to troops on the ground. The latter might comprise SVTOL type aircraft or attack helicopters.

For Navy, the need to take account of Capability development in a broader ADF sense might translate into enhancing the capability to transport and support amphibious forces as well as providing enhanced afloat C3I for the Joint Force and fire support. This would be particularly applicable in the conduct of Operational Manoeuvre from the Sea (OMFTS) Operations, where the Force might well be deployed for a protracted period in the region or beyond. The inherent ability of this Force is that it has the mobility



and flexibility to undertake a wide variety of tasks simultaneously. As Hewish, Janssen and Scott, in their article Power Projection gets Amphibious Boost noted:

"Amphibious forces have many advantages: they can be positioned over the horizon from a danger spot; they can be held concentrated, ready for rapid reaction; '(Poise)' and they can be dispersed, ready to reassemble rapidly when required. Amphibious forces also enjoy greater flexibility as, at sea, they are not constrained by the problems of sovereignty, which beset land and air forces."

The concept of Manoeuvre Warfare is not new but has been firmly embraced in recent years by a number of western nations as offering the best capability to respond to a wide range of potential tasks. Stewart Fraser (Bairrigg Memorandum 32) stated that "manoeuvre warfare is generally associated with images of land and combat, such as massed armour and Blitzkrieg tactics. However, it is a joint warfare concept equally applicable – and perhaps more so in some respects – to maritime forces. In this context, manoeuvre warfare has two elements: manoeuvre at sea; and manoeuvre from the sea. Manoeuvre at sea centres on naval operations, and is chiefly concerned with establishing sea control over critical SLOCs, and precursor operations in the littoral area, to meet the requirements of the overall joint campaign on land, while manoeuvre from the sea applies the techniques of manoeuvre warfare to power projection. The USMC concept, as defined in Operational Maneuver from the Sea, outlines the idea of the littoral and adjacent SLOCs as a manoeuvre space:

"What distinguishes [OMFTS] from all other species of operational maneuver is the extensive use of the sea as a means of gaining advantage, an avenue for friendly movement that is simultaneously a barrier to the enemy and a means of avoiding disadvantageous engagements. This aspect of [OMFTS] may make use of, but is not limited to, such techniques as sea-based logistics, sea-based fire support and the use of the sea as a medium for tactical and operational movement."

This capability confers upon Commanders enormous flexibility whereby they are able to apply the necessary level and mix of force to any particular task/mission. In the Fire Brigade analogy, the Commander, in conjunction with his principal advisers is therefore able to make an appreciation of the situation, determine the requirements and assign the necessary resources to achieve the task. Once completed the Force is available for new tasking, either by relocating within the AO or be withdrawn to its base afloat. The fact that the force is able to range

over considerable distances whilst at sea further increases the mobility and flexibility of the force in being able to respond adequately to a wide range of tasks.

Force structure

Whilst the ADF clearly does not have the same force levels and resources as the USMC, it is suggested that the ADF, with some realignment and enhancement to its force structure and resources could achieve a significant capability in the conduct of manoeuvre warfare under a maritime strategy.

In terms of force structure, the ADF might look at the UK Joint Rapid Deployment Force (JRDF) as a model for developing a highly mobile and flexible response force. The JRDF was formed in August 1996 and whilst essentially a national force is able to operate as part of a multi national force in the conduct of both combat and non-combat functions.

The force is based upon 3 Commando Brigade, Royal Marines and 5 Airborne Brigade. Both Brigades are essentially light Infantry formations "both in the modern sense of composition and equipment scale and in their training for traditional light Infantry duties such as raiding. Each is an independent formation with integral artillery, engineering, and logistics support, though the emphasis is somewhat different. For JRDF purposes, a reinforced brigade is seen as the maximum feasible deployment.

5 Airborne may be used where reaction time is critical, perhaps measured in hours rather than days, and sustainability is not the foremost issue. On the ground, without external support, the Airborne Brigade lacks the tactical mobility of its RM counterpart (for example, it has no permanently tasked support helicopters and relatively few vehicles). Conceivably, 5 Airborne might be required to seize an airfield as part of a maritime operation; equally, the composition of an airborne battalion enables it to be used as amphibious group reinforcements (2 and 3 Parachute Battalions were successfully attached to 3 Commando Brigade during the Falklands conflict).



3 Commando has a wider variety of assets, providing it with a greater degree of combat utility – especially tactical mobility and firepower – than its Airborne equivalent: cold weather and mountain warfare skills have, however, been retained in the post – Cold War period. Supporting forces include BV-206 all-terrain vehicles, a Rapiere SAM battery, 24 RN Sea King assault helicopters permanently assigned to the Brigade, an independent landing craft squadron and another of small Rigid Rafting Craft, and a squadron of Gazelle scout and Lynx anti-tank helicopters. The formation has integral Special Forces elements, the Special Boat Squadron, and the Mountain and Arctic Warfare Cadre.

For maritime purposes, both JRDF core units can be reinforced with armoured or armoured reconnaissance elements, probably in no more than squadron strength (around 12 Challenger tanks or Scimitar reconnaissance vehicles, respectively) on account of the sizeable support tail required by such units. In a medium-to-large-scale conflict, deployment of the JRDF may only be a precursor to a divisional-sized build-up. "As Dr Michael Evans noted in his paper" "This is a concept of maritime strategy in which doctrinal refinements and new technology seem to give amphibious and airmobile operations greater strategic potential than ever before in the history of arms."

Decision Time

The ADF, at the end of the 20th Century appears to have arrived at a critical point in its development with some fundamental choices to be made as to how to do business in the 21st Century. The reality of Australia's geo-strategic situation in a region that is both maritime and littoral by nature dictates the adoption of a strategy that reflects the demands of this environment. This requires the development of a maritime strategy that caters for the broad range of contingencies that could arise in the Sea-Air-Land gap. Neither ASP 97 nor RTA cater for this dimension of Warfare, as the focus remains on the Defence of the Sea-Air gap by Navy and Air Force and on the Defence of Continental Australia by Army. As Dr Michael Evans noted in the concluding remarks to his paper, "Given geography, Australia's concept of strategy must be a maritime one, but it must be a concept in which land forces play a more precisely defined role... Between the contending imperatives of ASP 97 and the 1997 TRA plan there is a strategy-force mismatch. Because Australia's current maritime concept of strategy is not fully integrated, it is questionable whether such a synergy between military means and political ends can be achieved. Under ASP 97, a naval interpretation of maritime strategy without available land forces courts possible disaster, under the 1997 RTA, a continental strategy based largely on land forces courts probable irrelevance."

Whilst the ADF remains small in size, compared to a number of larger allies, there is enormous potential to maximise the effects of a relatively small defence force by adopting the concepts of manoeuvre warfare, whereby forces are concentrated at key points to apply leverage. The effectiveness of manoeuvre warfare calls for high levels of mobility and flexibility, as well as high levels of training and readiness. Again quoting from Dr Michael Evans, "the ADF needs to put prime intellectual effort into broadening the parameters of the current maritime concept of strategy. The Army needs to examine the use of land forces in contemporary conflict, it needs to emphasise its manoeuvre potential across the full spectrum of likely operations, and it needs to define carefully its force structure priorities to transform itself into an agile, concept-driven force."

The ADF is fortunate that many of the component parts required to develop a highly mobile and responsive force already exist within the ADF force structure. 3 Brigade as the Operational Deployment Force already provides the nucleus for the development of a highly mobile force. The LAV and Bushranger development programmes will confer increased mobility to the force.

Artillery, Engineer, Armour, Signals and Logistic support units are already well embedded into the Army orbat. In addition helicopter support is available through 5 Aviation Regiment, and the RAN and RAAF. A modest level of strategic and tactical air and sea mobility is available with the C130 Fleet and the newly redesigned LPA's HMAS *Kanimbla* and HMAS *Manoora* in conjunction with HMAS *Tobruk*.

The effectiveness of these forces however depends upon the adoption of a clear warfighting capability based very much on the integration of the capabilities to the common purpose of being able to provide a highly mobile and responsive force, able to operate in the maritime environment. This may require some reorganisation to the current force structure and the replacement of heavy equipment with lighter, more mobile and air/sea transportable equipment. This may well require the replacement of heavy armour and medium artillery with lighter equivalents as well as an increase to the helicopter force and available helicopter platforms, at sea. The provision of air defence for those naval and army units operating as a joint force in the maritime environment will be of paramount importance. The subsequent development of future capabilities across the ADF must continue to reflect the underlying requirement to develop a highly mobile and responsive force that is able to operate effectively throughout the region. It is possible that some significant savings in cost and manpower may be achieved through the rationalisation of the developmental process, thus offsetting some costs relating to restructuring changes. As Dr Michael Evans noted:

"In the twenty-first century, the army must move towards a more agile force structure based on the multifunctional needs of a 'three theatre' role. It must develop a warfighting capacity to mount deterrence, compellence and reassurance missions across Australia's potential continental, offshore and international theatres."

Conclusion

The ADF at the end of the 20th Century is faced with some significant decisions concerning its structure and modus operandi into the 21st Century. The world has changed, and whilst a number of countries have dramatically realigned their defence forces to reflect these changes, the ADF has yet to change from its long established structures. The coalition Government's stated increased involvement within a region, that is both predominantly maritime, growing in importance but also becoming increasingly unstable, demands that recognition be given to Australia's geo-strategic situation and that the cornerstone of Australian defence policy in the 21st Century be established upon a maritime strategy.

To be effective, the ADF must not only adopt a maritime strategy that reflects Australia's geo-strategic situation in a predominantly maritime environment but changes its structure and modus operandi to undertake manoeuvre warfare. Whilst the ADF has a broad range of existing capabilities, these need to be reviewed, so that hollowness within the structure is removed and the ADF acquires a lighter, compact and more mobile capability so that it can adapt and react quickly to changing situations, particularly within the region. Force elements must be capable of coming together as part of a joint force to meet any given task. The Development of such a capability, demands that single service developments reflect the requirements of the total force. In addition,

emphasis should be placed on high levels of training and cross-training with other Force Elements to ensure that a high level of familiarity and interoperability is achieved across the ADF.

The ability of this force to be effective throughout the region into the 21st Century demands that the ADF re evaluate its modus operandi and adopt the concepts of manoeuvre warfare. The development of future single service capabilities must reflect the needs of the total force requirement, so that the ADF can indeed become A Force for all seasons.

Editors Footnote: Since this article was received for publication, a new Army document entitled The Fundamentals of Land Warfare was published. This document calls for the establishment of Expeditionary Forces able to operate in the Asia Pacific region and serves to underscore the emphasis now being given to this capability.

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HMAS Balikpapan prepares to come alongside HMAS Tobruk. Initial landing 99

Amphibious Warfare and the ADF

by Maritime Command Staff

The RANs history of involvement in amphibious warfare is a long and crowded one. It is not often remembered that the largest single operation which the RAN has conducted was the assault on Leyte Gulf in October 1944. The Australian ships present included cruisers, destroyers, landing ships and surveying vessels. All of those units were already very experienced in amphibious work as a result of the South West Pacific campaigns of 1943 and 1944 and they made an important contribution to the Allied campaign. They were to go on to undertake further operations in Lingayen Gulf and in Borneo in 1945. Ironically, half a world away from the South West Pacific, there were RANVR personnel marking the way for the Normandy invasion in mid-1944. Submarines and RAN, RANR and RANVR personnel scattered throughout a multitude of other ships in the vast invasion fleet.

These operations collectively demonstrated very clearly one of the most important aspects of amphibious warfare, and one that is not always fully understood. Amphibious warfare is not only complex and demanding because of its inherently joint nature and the need to integrate with both land and air forces in the littoral environment. It is a challenge just as much because it involves every aspect of naval capability and every area of naval warfare. Amphibious operations cannot even be contemplated unless control of the sea – however confined in time and space to the needs of the particular operation – can be secured and this control must encompass above, on and below the sea. It requires all forms of naval combatants and all arms of the service, from anti-submarine to mine countermeasures and anti-surface operations. Furthermore, it is inherently knowledge based. Successful amphibious operations require a very high degree of understanding of the littoral and this requires not only access to the most sophisticated possible data bases – built up by years of steady peacetime activity – but precursor survey reconnaissances. They thus represent one of the activities of the hydrography branch which demonstrates most clearly the fundamental dependence of the combat capabilities upon it. World War II saw all arms of the RAN working together in this way to put the Army safely ashore in hostile environments time and time again. It is a record that we cannot only be very proud of, but from which we still have much to learn.

The nature of our strategic environment since 1945 has meant relatively little emphasis on amphibious warfare as such by either the RAN or the Australian Army and

sometimes even insufficient attention to sea transport and logistics over the shore. Although the RAN acquired tank landing ships in 1946, their operational life was short and their employment very limited before they were disposed of. The sea transport role was largely assumed by the Army's Water Transport Squadron, which acquired medium landing ships (LSM) from the United States Navy in the late 1950s and then the small freighter *John Monash*. These ships were soon heavily occupied with logistic support for the Australian Army in Vietnam.

The RAN returned to the sea transport role in 1963 with the recommissioning of the old carrier HMAS *Sydney* as a training ship and fast troop transport. The latter role was to become her primary task for the next decade as she ferried troops to and from Vietnam, earning the nickname of the "Vung Tau Ferry". Progressively fitted with LCVPs and flight deck cranes and with extensive accommodation and some retained flight facilities, *Sydney* was a very capable ship indeed, despite her age. Ironically, it was only after the end of Vietnam commitment and just before *Sydney* was paid off, largely as an economic measure, that the first substantial exercises in tactical vertical lift from the carrier, using RAAF helicopters, were trialled.

The disposal of *Sydney* was recognised as a major reduction in capability and a project slowly evolved for the acquisition of a multi-purpose amphibious transport. At the same time, after long negotiations, the RAN took responsibility from the Army for the operation of the larger water transport units, notably those which possessed sleeping accommodation. In practice, this meant that the new Heavy Landing Craft (LCH), built to replace the LSMs, were commissioned into the Navy, while the much smaller Landing Craft Mechanised (LCM) were retained by the Army. The RANs new responsibilities were recognised by the creation of the First Australian Landing Craft Squadron, based at HMAS *Moreton* in Brisbane.

The design selected for the new major unit was a development of the British *Sir Bedivere* class landing ship. Laid down in 1979 and completed in 1981, the Heavy Landing Ship (LSH) *Tobruk* represented something of a compromise in that she was not 'sized' to carry and deploy a substantial Army formation (such as a battalion group) but represented the greatest multiple capability possible on a very limited budget. She could carry and deploy LCM 8s, operate helicopters, discharge cargo by her own cranes, discharge over the bow onto a beach or a lighter and discharge onto smaller landing craft via her stern door.

Tobruk was to become a vital element in the creation and retention of a core capability within the RAN and the Australian Army for amphibious operations. A limited, additional transport capability came in the training ship *Jervis Bay*, a converted car ferry, which could unload over her stern door to lighters and landing craft.

After *Tobruk's* commissioning, the Landing Craft Squadron was reconstituted as the Australian Amphibious Squadron and much effort went into the development of landing techniques and skills. The contemporary development of defence strategy, however, was coming to emphasise the defence of Australia, particularly within the 'sea air gap' as the primary determinant of force structure. At a time of stringent restrictions on defence funding, the amphibious and sea transport capabilities came under great pressure and in 1986, HMAS *Moreton* was closed, *Tobruk* moved to Sydney and the majority of the LCHs paid off into reserve.

The events of the next few years showed that more emphasis on sea transport and on the ability to put land forces ashore was needed in the ADF. The 1987 Fiji coup raised the prospect of a services protected evacuation and made it clear that a renewed emphasis was needed on amphibious techniques within the ADF. The lesson was reinforced in 1988, when RAN units were placed on alert to conduct an evacuation of Australian nationals from Vanuatu. It was becoming clear, too, that the nature of the Australian environment itself, with an undeveloped and often impassable north and several isolated offshore territories, required that we consider it to be a 'dry archipelago' with the associated reality that when the Army moves over long distances and on the large scale, that movement must be by sea and air. On the small scale, all but one of the LCHs was progressively returned to service and plans were laid for the development of JERVIS BAY's helicopter operating capabilities.

The importance of sea transport and amphibious capabilities continued to be demonstrated into the early 1990s, not only through the mechanism of major exercises such as the KANGAROO series, but in the ADF's deployment to Somalia in 1993 and its operations in Bougainville in 1994. The challenge for the ADF was thus to renew and improve its capabilities within a limited budget and this came with the offer by the United States Navy of two NEWPORT Class tank landing ships. *Manoora* and *Kanimbla* were commissioned into the RAN in 1994 and shortly afterwards arrived in Australia. They immediately replaced the *Jervis Bay* and it was the plan at this stage, when their refits for Australian service were completed, that *Tobruk* would also go.

The difficulties which were encountered with *Manoora* and *Kanimbla* over the following few years are well known, but they are being overcome. Within

the modernisation package are a range of alterations to improve their flight and hangar capabilities, install command and control spaces and a highly capable medical facility. Both are scheduled to complete their refits and modernisation in 1999/2000 and they will embark upon an extensive programme of trials and training to prepare them for service.

The requirement for a tactically effective amphibious capability was reinforced by the publication of Australia's Strategic Policy 1997 which included the Defence of Regional Interests as a capability determinant in addition to the defence of Australia itself. Given the maritime environment of the region, military forces must move by sea and must also be ready to deploy into undeveloped areas without the benefit of sophisticated port facilities or airfields. An early result of this shift in strategic direction was the decision to retain *Tobruk* in service, thus retaining her unique heavy lift capability as a complement to the two LPAs to the point where the tactical lift of a battalion group will be a realistic goal for the ADF.

1999 marks a key point in the development and renewal of the ADF's amphibious warfare capabilities. *Manoora* and *Kanimbla* are expected to start their trials at the end of their extensive modernisation programmes. *Tobruk* begins a major and much needed refit and the Life of Type Extension Programme (LOTE) for the five active LCHs gets under way. This commitment of resources by the RAN is also being reflected in the Army's increasing focus on amphibious capabilities within its own units, particularly 3 Brigade in Townsville.

The new organisation of Commander Australian Amphibious Forces (CAAF) came into being on 01 February 1999. CAAF will manage the Amphibious Force Element Group on behalf of the Maritime Commander. In addition to his naval responsibilities for readiness and training, he also has charge of joint aspects of amphibious training and readiness and this means that he has a key role in coordinating and assessing the joint efforts required to bring the ADF's amphibious forces to the required level of operational capability. Many old skills will require to be relearned and many new ones, particularly relating to helicopter operations from the LPAs, will need to be developed.

Captain Steve Hooke, who has just completed a posting as Chief of Staff to NORCOM, is the first CAAF. He is supported by a small joint staff based at Garden Island. The officers and senior sailors of CAAF will play a vital role in bringing the amphibious capability of the ADF to the point where it will meet the strategic requirements of the present day and of the future.



Book Review

ALL MEN BACK – ALL ONE BIG MISTAKE

By LCDR Greg Swinden

An odd title for a very interesting book. This is the story of young signalman Bill (Buzzer) Bee, who served in the cruiser HMAS *Perth* at the battles of the Java Sea and Sunda Strait and was later a Prisoner of War of the Japanese.

Following the sinking of *Perth*, and the cruiser USS *Houston*, in the Sunda Strait the story follows the adventures and misadventures of Bill Bee and the other *Perth* survivors as they are held captive in a variety of Japanese POW Camps. These include camps in Java, Singapore, Thailand, Burma (including their time spent on the infamous Thai-Burma Railway) Indo China and finally Japan where they were employed underground in Japanese coal mines.

The title of the book comes from a habitual saying of their Japanese overlords; when a planned move from one camp to another fails to eventuate due to some breakdown in the Japanese communication or logistics chain (a bit like the Australian version of 'packs on packs off – hurry up and wait').

The book ends with Bee returning safely to his family home in Western Australia, however, over 100 of his comrades did not return – victims of untreated wounds received in battle, malnutrition, Japanese brutality or killed when their unmarked prison ships were sunk by Allied submarines or aircraft.

I found the authors style of writing very easy to read and the story captivating, no pun intended, and finished the 156 page book in a few hours. Although the story of the Australian POW's held by the Japanese has been told several times before, both collectively and on an individual basis, the tales of the hardship they endured and their determination to survive never cease to amaze me.

Hesperian Press published this book and they have done a very good job in doing so. The book includes over 30 illustrations, mainly photo's of HMAS *Perth* and members of her crew and a folded map of South East Asia which is a copy of a Red Cross publication from World War II showing the location of Japanese POW Camps. An appendix lists the Ships Company of HMAS *Perth* their final fate (ie killed in action at Sunda Strait, died as a POW, died since the end of the war, or still living).

I purchased my copy for \$19.95 from a small bookstore in Western Australia (where the publisher and author are located), however it may not be readily available on the east coast. The book is available from Hesperian Press PO Box 317 Victoria Park WA 6979 for \$23.50 (which includes \$3.50 postage and handling) or direct from the author, William Bee of 26 David St Mullaloo WA 6027. Payment in both cases is by cheque or money order.

