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AUSTRALIAN NAVAL INSTITUTE INC

The Australian Naval Institute Inc was formed and incorporated in the Australian Capital Territory in 1975. The main objects of the Institute are:

- to encourage and promote the advancement of knowledge related to the Navy and the maritime profession,
- b. to provide a forum for the exchange of ideas concerning subjects related to the Navy and the maritime profession, and
- c. to publish a journal.

The Institute is self-supporting and non-profit-making. All publication of the Institute will stress that the authors of articles express their own views and opinions and that these are not necessarily those of the Department of Defence, the Chief of Naval Staff or the Institute. The aim is to encourage discussion, dissemination of information, comment and opinion and the advancement of professional knowledge concerning naval and maritime matters.

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CONTRIBUTORS

In order to achieve the stated aims of the Institute, all readers, both members and nonmembers, are encouraged to submit articles for publication. Preferably, submissions should be typed, double spaced, on A4 paper; the author's name and address must be shown clearly, even if a pseudonym is required for printing purposes; to be eligible for prizes, original articles must be accompanied by statements that they have been written expressly for the ANI; and short biographies will be welcomed. The Editor reserves the right to reject or amend articles for publication. It will pay the authors of articles, specially written for the Journal and accepted for publication, \$10 per 1000 words commencing from the August 1989 edition of the journal. An annual prize of \$25 for the best book review will continue. These payments will not be made to the authors of articles such as staff college prize essays and Peter Mitchell competition entries.

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Views expressed in this journal are those of the authors, and not necessarily those of the Department of Defence, the Chief of Naval Staff or the Institute.

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Cover Photo: SQUIRREL CSPH WHITING

FROM THE PRESIDENT



The inaugural Vernon Parker Oration on Monday 1 May 1989 is the lead article in this issue of the Journal. The occasion was a great success and the military theatrette at the Australian Defence Force Academy was filled to capacity. The Commander-in-Chief US Pacific Fleet, Admiral David Jeremiah, truly was the right calibre of speaker for this very special event.

I want to make membership of the ANI an important element of a Naval persons career. I was especially pleased therefore that some 50 officer cadets from the Defence Academy came to hear the Oration. They represent the future strength of the Institute and it is important that they become members and contribute to the Journal. Provided we can ensure the Institute's interests are relevant I feel confident they will join.

Admiral Jeremiah and the Vernon Parker Oration have set the ANI on the correct course, it is up to your Council to hold it.

On 19 April 1989, in a similar address to that given by Admiral Jeremiah, the Commanderin-Chief US Pacific Command, Admiral Huntington Hardesty outlined the increasing change occurring in the Pacific strategic environment and to what he believed the US security position in this region should be. His audience was the US Senate Armed Forces Committee so his words were chosen carefully.

Admiral Hardesty indicated that while US Pacific forces must be fully able to cope with a Soviet adversary, they must also serve other critically important national security objectives in the region. These include:

- maintaining access to forward locations for operational flexibility.
- bolstering confidence in the US as a reliable ally
- serving as honest broker to assist in maintaining a regional balance
- protecting critical sea lines of communication, and
- maintaining US strength in the Pacific to act as a deterant to Soviet aggression in central Europe.

Admiral Hardesty, when predicting future development in the Pacific and Indian Oceans in the near future, saw:

- · movement towards diminishing security tensions
- · potential for Soviet citizens to become interested in overtures from the West
- some concern over the growing Indian power projection capability
- continued importance of North East Asia economically, politically and militarily
- trade emerging as a contentious alliance issue
- · nationalism emerging as a concern for US alliance interests, and
- renewed debate by the US allies on what constitutes adequate levels of military investment.

All in all the inaugural Vernon Parker Oration was most timely, relevant and professionally rewarding. I intend that future orations will be of a similar quality.

Accordingly, I am pleased to announce that the Minister for Defence, Mr Kim Beazley, will deliver the next Oration on Wednesday 6 September 1989. I have asked that Mr Beazley discuss the development of Australian Defence Policy.

I believe your Council is on the right track with the Oration. If you agree please show your support by turning up on 6 September.

Sincerely,

Ian Callaway

FROM THE EDITOR

I must apologise for the late distribution of the Journal, however at this time of the year other minor events such as exams have impinged upon my time. The August Journal is already being prepared and the closing date for articles will be 4 August.

This edition of the Journal contains, I believe, a varied set of interesting articles. The lead article is the address to the ANI, in May, by CINCPACFLT — Admiral David Jeremiah, USN, and this is well supported by the "Petronius" article which was awarded the Peter Mitchell prize in 1988. The two articles concerning Sea Lanes of Communications are published courtesy of the Australian Defence Association.

The inclusion of the farewell addresses has not been a practice in the past, however, I felt that the contribution made by CDRE Cummins to the RAN, and the inspiration he gave to others, deserved recognition.

As Editor I continue to receive very little critical comment concerning the Journal articles. Letters to the editor are indicative of the interest and agreement, or otherwise, taken by readers. Are the articles not of interest? If so, please write and let me know of improvements that could be made. Better still — write an article! A wider base in article variety relating to maritime matters would assist in raising the standard. But it is up to you — the reader and contributor.

Finally, I would like to bring the attention of authors to the note at the inside front cover of the Journal. Authors are requested to attach a biography and submit articles on A4 with double spacing.

Regards

Don Agar



"DESTROYERS OF WORLD WAR TWO"

An International Encyclopedia

by M.J. Whitley

Published by Arms & Armour Press of London. Available in Australia through Capricorn Link (Australia) Pty Ltd. PO Box 665, Lane Cove, NSW 2066 (RRP \$105) Reviewed by Vic Jeffery

This 320 page encyclopedia is the first largescale, comprehensive work to detail in one single volume all the combatant and neutral destroyers extant, completed or laid down during the period 1939-45 by the navies of the world.

BOOK

REVIEWS

A unique and invaluable reference work, this encyclopedia enables the reader to compare different classes of World War II destroyers at a glance.

Each class is described under three headings, Design, Modifications, and Service. Full data tabulations are presented; including builder, laying down, launching and commissioning dates. Also included are notes on the fate of each ship and particulars; dimensions, armament and performance.

Nearly 2500 destroyers are listed in this book. All destroyers, destroyer escorts and torpedo boats down to 300 tons displacement have been included.

Australia's contribution to this publication is 13 destroyers (the "Scrap Iron Flotilla", three Tribals and the five N-Class.) The three Qclass, **OUIBERON, OUICKMATCH** and **OUAL-***ITY* appear under the Royal Navy section as RAN-named, but administered by the Royal Navy.

The role of the destroyer as envisaged in 1939 had altered greatly by late in the war. Although remaining "maids of all work", destroyers assumed the general role of escorts, thus becoming more defensive than offensive units.

By this time the categories of destroyers was basically the pure fleet destroyer; purpose-built anti-submarine destroyers; anti-aircraft destroyers; small destroyers or torpedo boats and the French extra-large destroyers/light cruisers.

This encyclopedia is supported by a most comprehensive seven page introduction which is divided into seven sub-sections following the evolution of the destroyer-type ship from the 19th century boat through the formation years of the early 20th century, the impetus of World War One, the inter-war economics, and finally World War II.

Literally loaded to the gunwales with information "DESTROYERS OF WORLD WAR TWO" receives excellent illustrative support from 383 carefully selected black and white photographs and 97 line drawings.

The only disappointing factor which is to be expected with a reference work of this magnitude, is the price which at \$105 is prohibitive to many people. However, the quality of this encyclopedia is unquestionable and its format fills a void in naval history.

Recommended reading.

(Continued page 14)

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"The suggestion has been made that the people should trust the president to make the right appointment. I think that ordinarily we do around here. But after all, the Constitution has vested in us the responsibility for advice and consent, and it is one that we should exercise." This interpretation of the Constituition by then-Senator from Texas, John Tower, surely gave comfort to Senators when they voted not to consent to President George Bush's nomination of Tower as the Secretary of Defense.

It is hard to explain the shock here in Washington that Tower's rejection caused. Only eight cabinet nominees prior to Tower had been rejected by the Senate in the entire history of the Republic. It had been 30 years since a cabinet nominee had been rejected. No nominee to a president's first cabinet had ever been rejected. Furthermore, it has been a given that a president could expect automatic Senate confirmation if a senator accepted an executive of judicial appointment. Indeed many senators have been given such appointments because the president did not want to face a bitter confirmation battle.

On the face of it, few people were more qualified to be secretary of defense than John Tower. Tower spent two decades in the Senate honing his expertise in defense and concluded his years in that body as chairman of the Armed Services Committee. After leaving the Senate in 1985, Tower served as an arms reduction negotiator in Geneva and chairman of the Tower Commission that investigated the Iran-Contra affair for President Ronald Reagan.

But instead of receiving confirmation, Washington was treated to a terrific political melodrama played out under the glare of the mass media. Why such a humiliating rejection of a former member by a body known for its collegial atmosphere? There appears to be no one reason why Tower was defeated but rather a collection of substantive and political problems that he and the President were unable to overcome.

WASHINGTON NOTES

by

Tom Friedman

There were three main "substantive" charges made against Tower: that he was a womaniser, that he abused his position as an arms negotiator by entering into lucrative consulting contracts with companies directly effected by the negotiations he led, and that he was an alcoholic.

Tower admitted that he enjoyed the company of beautiful women, and, according to published reports, he indulged this predilection to the fullest. Short of one of these many women being a Soviet agent, it seemed hard to condemn him. But as a woman staff member on the Hill said to me, a woman with a sexual reputation like Tower's would not have been ever considered for as sensitive a post as secretary of defense, let alone nominated.

One problem that rubbed many senators the wrong way was Tower's consulting contracts with major defense contractors that he entered into after his tour as an arms negotiator in 1985–86. Tower himself gave conflicting testimony about what services he actually performed for his clients but wanted to give the impression that he gave them no more than "enlightened judgement." Apparently, more than one senator felt that Tower's clients would have been better served had they gleaned their information directly from the newspapers rather than spending \$750,000 to have it filtered through John Tower.

The drinking problem, however, assumed major proportions. The evidence showed that during the 1970s and early 1980s that Tower had been a heavy drinker. In addition to independent testimony and evidence gathered by the Federal Bureau of Investigation (FBI), Representative Larry Combest (Republican-Texas) met with Armed Services Committee Chairman Sam Nunn (Democrat-Georgia) and Ranking Minority Member John Warner (Republican-Virginia) to tell the senators about his experiences as a member of Tower's staff.

Combest said that during the 1970s it was not unusual for the senator to consume several bottles of scotch a week. Combined with episodes in this decade. Nunn saw a pattern of alcohol abuse that had never been "recognized and dealt with". Not even a demeaning public pledge by Tower not to drink could quiet concern on this matter.

In announcing his vote against Tower in the committee, Nunn noted that the armed services were fighting a hard battle against alcohol abuse and that it would not be a good example for the services to have a known alcohol abuser as secretary of defense. Nunn said that he could not vote to confirm a person for the second place in the national chain of military command whose problem with alcohol was such that, had he been an officer on active service, he would not have been allowed to command a strategic missile wing, a strategic bomber wing, or a strategic missile submarine.

On the political side, the case can be made that the nomination was mishandled almost from the beginning.

Article II of the Constitution provides that the president shall nominate an officer of the government with the "advice and consent" of the Senate. The Founding Fathers did not want the power to appoint government officials to rest solely in the executive. Many delegates to the Constitutional Convention felt that the appointment power should be vested in the Senate alone.

Just as the idea of a Cabinet is not mentioned in the Constitution, neither did the Founders establish any criteria or guidance under which a nominee should be rejected. Some of Tower's supporters argued that there was an obligation to confirm the President's nominee. But if this were the case, why was the provision put into the Constitution in the first place? And if no criteria was established, does that not leave to each senator's conscience to vote the way he sees fit using any reasoning, political, philosophical, or otherwise, that he sees fit?

Then-Senator Tower must have agreed because he was not adverse to opposing defense appointments when they clashed with his belief that the Senate should use its own judgement or where the nominee's ideology conflicted with his own. Thus, he voted against the nomination of Paul H. Nitze to be secretary of the Navy in 1963 and Paul C. Warnke to become head of the Arms Control and Disarmament Agency and chief SALT negotiator in 1977.

Despite the fact that Republicans said that Democrats were not practicing their much touted bipartisanship in helping set-up the new administration, all of the President's nominees up to the date of the Tower defeat had been approved unanimously, and, as of mid-April, no other nominee has been rejected and only a handful of votes have been cast in opposition to any nominee.

In fact, Tower was well on the road to confirmation despite his early problems. Only when a <u>conservative</u> activist and lobbyist, Paul Weyrich, testified before the Committee that he had encountered Tower on numerous occasions in a less-than-sober state and with "women to whom he was not married" did public support begin to swing against the nomination, a swing in opinion that eventually affected a majority of the Senate. This televised testimony "opened the floodgates" to new allegations and Tower's responses to them were so inept that they could be characterized as a self-inflicted wound.

The new White House staff caused several costly blunders which were made all the worse because George Bush, the ultimate insider, campaigned on the proposition that he would be able to "hit the ground running" whereas his competitor would need breaking in.

The President's delay in appointing Tower, caused in large part because of the extensive FBI background search that was considered necessary, planted seeds of doubt in the public's mind about Tower's ability to function in high office. Once the selection was made, Senators Nunn and Warner did keep a semblance of bipartisanship alive in the Armed Services Committee until the White House briefed Republican committee members about the FBI's investigation without Democratic attendance.

Finally, when the power and prestige of the presidency could have been used to bring wavering senators into line, the President was travelling, first to Canada and then to the Far East. By the time he returned from the latter trip, the cause was all but lost.

Senator Richard C. Shelby's (Democrat-Alabama) metaphor may have summed it up best: the administration "poured gasoline all over (Tower) and sent him up to the Senate. Paul Weyrich struck a match and he continued to burn."

Tower was, in part, a victim of changed perceptions. The role of women in American society (and notably in the defense establishment) has changed. Men who are seen to treat women as mere sex objects do so at their own peril. For a public official, such treatment can mean political or professional suicide. Drunkeness is no longer tolerated as it once was due in no small part to the campaign against drunk driving that has taken hold in the United States over the last decade.

Finally, the Senate had changed. The glare of television coverage has put the public and private lives of Senators in the fishbowl. The atmosphere is less of that of the tight knit social club that it once was. Senator John S. McCain III (Republican-Arizona) says that the pressure of business, in amount and complexity, and the necessity to spend more time away from Washington have combined to cut down on friendships between senators. Many of these friendships, notes Senator McCain, crossed party lines.

In the end, it was probably the last factor that trapped Tower's defeat. Not only was he not liked by many of his peers, and their staffs,

Photo: LSPH W McBride, RAN

he was downright hated by many, a fact which he acknowledged. "He was a bastard when he was chairman of the Armed Services Committee," was an indictment I heard on more than one occasion. John Tower had alienated so many of his colleagues that when he had to go to the well for sustenance, the well was dry.

"Be nice to the people on the way up," my father once advised me. "They may be the same people you see on the way down." Dad is a wise man.

The destroyer escort HMAS SWAN arriving "home" at the HMAS STIRLING Fleet Support Facility on January 12, 1989 after a three month South East Asian deployment.



INAUGURAL VERNON PARKER ORATION

(Australian Defence Force Academy, 1st May 1989)

INTRODUCTORY WELCOME By Commodore I.A. Callaway, RAN

Admiral Jeremiah, Admiral Hudson, Ladies and Gentlemen.

Commodore Vernon Parker retired from the Navy in 1978 after 38 years service. He died in 1986. It was during his last years in the Service that his vision for a Naval Society came to fruition. He was the first President of the Australian Naval Institute at its formal birth in July 1975.

Vernon Parker made light of the difficulties and frustrations he experienced during those formative years, but he rallied support and the Institute took on a life of its own. It is appropriate that the ANI remember Vernon Parker and his exuberance, enthusiasm, vision and energy, it is very important that the Institute also remember its principle aim which is to "encourage and promote the advancement of knowledge related to the Havy and the maritime profession". I hope that the Vernon Parker Oration in the years to come will enable us to do both these things.

For the inaugural Oration it seems specially fitting that the speaker be so distinguished. Admiral Jeremiah has been Commanding Officer of a guided missile destroyer, Commander of a cruiser destroyer group, a task force and a battle force. As Task Force Commander he directed the capture of the Achille Lauro highjackers and as Battle Force



CDRE I.A. CALLAWAY presents CINCPACFLT with an ANI silver medallion.

Commander he directed operations in the Gulf of Sidra which resulted in an action against Libyan units. After a series of very senior staff postings Admiral Jeremiah assumed duties as Commander-in-Chief US Pacific Fleet on 30 September 1987.



CINC PAC FLT meets two of the ADFA students.

THE PACIFIC PERSPECTIVE: PEACE AND PROSPERITY

by

Admiral David E. Jeremiah Commander-In-Chief US Pacific Fleet

It is indeed a pleasure and a privilege for me to be here this evening... and I am honoured to have the distinction of being the first speaker in your Vernon Parker Oration series.

When Commodore Parker founded the Australian Naval Institute in July 1975, his objective was to provide a forum for the exchange and advancement of ideas concerning subjects relating to the Navy and the Maritime profession. In keeping with his objective, I would like to offer you my view of the Pacific from a strategic-military perspective, and share with you some of my concerns about the future of peace and prosperity in the region.

There are two key points I hope you take with you. First is the growing economic strength of the Pacific Nations and their interdependence with the rest of the world. This economic interdependence is in turn absolutely dependent upon the sea lanes. The economic and political growth of the Pacific rim has occurred not only because of the industry of its nations, but also because of the protective shield provided in the main by US Naval Forces. We must maintain ready, forward-deployed Maritime Forces capable of defending our national security objectives, specifically including freedom of the seas. Secondly, despite the perceived "cold war" thaw, the Soviet Union is still the primary security concern to and in the region. And there is a real disparity between what we hear from the Soviets and what we so far actually see.

Before I say more about the Soviets, let me return to the Pacific perspective.

Nearly one hundred years ago, Secretary of State John Hay wrote: "The Mediterranean is the Ocean of the Past, the Atlantic is the Ocean of the Present, and the Pacific is the Ocean of the Future." I, and I think most, if not all of you, believe the future is now!

The Indo-Pacific region today is a dynamic region undergoing broad change. Although it is still a bi-polar theater dominated by the US-

USSR Military balance, the continued development of regional and sub-regional powers such as Japan, China, India and South Korea make that balance more complex. The explosive economic growth of the Pacific has meant some of our allies and close friends, who were once economically dependent on the US, are now among our most vigorous economic competitors. This has produced new and different pressures within our network of allies and friends.

In addition, the political movements taking place in the region have had significant impact on US relationships with other nations. On the one hand, the move toward democratization in many countries has been a big boost to the spread of freedom. On the other hand, these political developments have also sparked a resurgence of nationalism that must be understood to ensure our mutual interests are served.

In January of this year, President Bush travelled to Japan for the State Funeral of Emperor Hirohito and went on to China and Korea. By making his first overseas visit to Asia, he underlined the importance of the Pacific rim to the United States and the beginning of another world era: the Pacific Century. President Bush also reconfirmed our country's commitment to the region and our intent to remain a Pacific power. But in what context we operate to do this?

By way of background, let me review several key characteristics of the Pacific Theater. First is its simple enormity — a fact I do not have to explain to you, but a fact that is sometimes not clearly understood by my contemporaries back in the States. Second, it is an inherently Maritime Theater, one in which the political, military and economic future of all nations depends upon their unhindered access to the several seas, oceans and key straits and narrows connecting them. Third, the Pacific is the only theater in which the USSR has direct access to a major ocean; the only one in which the United States and the Soviet Union face one another across a common border — the 2,000 mile Maritime Frontier that extends from the Bering Strait to the North Coast of Japan.

These key characteristics require US Forces to be forward-deployed throughout the region to succeed with our national strategy to deter aggression by demonstrating our resolve through presence — showing the flag if you will — and to respond promptly and forcefully if aggression occurs, in order to keep opn the sea lanes.

A key element in our ability to deter aggression has been the presence of our post-World War Two security arrangements with East Asia. For over forty years, America has played a central role in a series of bilateral security treaties with Japan, the Republic of Korea, the Philippines, and Thailand. And we have maintained an important security relationship with Australia. Our common mission is to maintain peace, which involves a capability and a national will to deter aggression at whatever cost. Because US Forces cannot go it alone, regional security is a team effort, and any team effort requires frequent assessment of mutual concerns and challenges. That assessment is ongoing. The list of our important allies and friends is long. Accordingly, in the interest of time, let me address some of the most topical ... beginning with Japan.

Japan is a key element in the prosperity and security of the Pacific. Japan, with our help, has built itself into a superpower on the global scene and has developed its own democratic traditions. It now has a military budget which is comparable to the defense budgets of our major NATO allies, Great Britain and West Germany. Moreover, its defense budget has grown in real terms by 5 percent annually, over the past 5 years. Finally, it is in the midst of a defense modernization program that will provide the forces necessary for them to defend the air and sea lanes out to 1,000 nautical miles from the Japanese home islands.

However, even after achieving their selfdefense goals, Japan will continue to be confronted by powerful elements of the Soviet Far East military, which operate literally in her backyard. Japanese forces are good, but they face more numerous and more powerful Soviet forces. The US also maintains a sizeable force of air force fighter squadrons, the seventh fleet, and a marine expeditionary force in Japan. All of these forces are part of the US strategy of forward defense and serve the mutual security interests of both countries and the region.

Although US-Japanese military to military relations are excellent, there are growing concerns in both countries about the future of this relationship. Given the limited real estate available, sensitivity to the presence of US Forces in Japan, the land they occupy, and the air, land, and sea space they train in, is increasing. Concurrently, given the balance of trade problems between our two nations and the increasing pressure to reduce our own fiscal deficit, there are increasing calls within the US for Japan to assume an even larger share of the cost to maintain our regional military presence.

On the other side of the coin — Japan's Asian neighbours watch improvements in her military capability carefully. From my personal meeting with their leaders, these neighbours feel more secure when Japan's forces operate together with our forward-deployed force — as do the Japanese, who have no enthusiasm for reopening old World War Two wounds. Our own productivity, burden sharing and the proper size and composition of Japan's military are issues which we will have to deal with as our alliance with Japan continues to mature.

Another maturing US relationships is with the Republic of Korea. The Seoul Olympics showcased the tremendous advances that have taken place in Korea since the end of the Korean War. South Korea is moving forward with newfound international and economic confidence and continues its climb toward becoming one of the world's first-tier economies. More importantly, the country has its first democratically elected President in 17 years and continues to broaden its political processes. Many believe its just a matter of time before South Korea surpasses the North in military power. But across the DMZ, there is the real danger that North Korea will mistake the clamor of democracy as cries for revolution and attempt to preempt by attack. These changes will require re-examination of our strategic-military relationship; and discussions are already underway to ensure a smooth transition to this new relationship.

But a smooth transition may be more difficult with another of our Pacific friends — the Philippines. Last year, we successfully concluded a review of our Philippine base agreement after a very difficult set of negotiations. By 1991, we will renegotiate the entire agreement and the process will likely not be easier. Although opinion polls consistently show that the US presence is popular with the vast majority of Philippine citizens, there is a strong strain of nationalism among influential Philippine opinion makers which manifests itself as anti-Americanism.

While I am cautiously optimistic that the governments of the Philippines and the US will see it in their mutual best interests to continue US Military presence in that country beyond 1991, there are alternatives if these negotiations should fail. Relocation would be expensive, take years to complete and would not necessarily provide the same geostrategic advantages we now enjoy. But, the loss of these Philippine facilities would not change or disrupt our forward-deployed operations. For one of the virtues of Naval Forces is their ability to conduct operations at great distance from homeport, as evidenced by our operations in the Persian Gulf.

However, there is another side to the base issue often overlooked but also of great importance - the impact our departure could have on the stable development of the Philippines. Our departure could be politically and economically destabilizing, which could result in extremists of the right or the left assuming power. Neither would likely be in the best interests of the people of the Philippines or of Pacific democracies. We do not want to see a leftist government in the Philippines, for they would then dominate both sides of the South China Sea. Not so long ago, few thought we would be building Cam Ranh Bay for the future use of the Soviet Union. A similar developmenty in the Philippines would threaten both sides of one of the most heavily travelled sea lanes in the world.

Another developing relationship in East Asia is that of the US and China. China continues on a path of economic and military modernization. They are key participants in many Asian equations. Not so long ago a China-Taiwan confrontation was feared as a major threat to regional stability. Now it seems the People's Republic of China and Taiwan will peacefully work out their destinies. While any Sino-Soviet rapproachment is likely to be limited, the Sino-Soviet Summit could lead to reducing tensions along their common borders. China has also deployed military forces in advancing its claim in the Spratly Islands and will play an important role in the cessation of hostilities in Cambodia.

I believe that China will continue to look to the west for the technology and expertise it needs. For our part, the US will pursue a relationship with China that, on one hand, offers clear mutual benefits for its continued peaceful development, and on the other hand, encourages China to steer a course which promotes and enhances regional stability. To that end, I had the recent pleasure of hosting Vice Admiral Ma, the PLA-N Northern Fleet Commander, in Pearl Harbour. The Admiral was embarked in the first PLA-N vessel to visit a western port — a reciprocal visit to the US Navy visit to China in 1986.

An uneasy neighbour of the Chinese and another growing military power in the region is India. Her military buildup is both defensive and offensive, mostly of Soviet origin, and impressive. Yet while the Soviets continue to be their major arms supplier, India is a democratic country with interests in establishing a successful relationship with the west. There is a mutual benefit in more extensive and generally improved military to military relations between the US, India and our other friends in the region.

Elsewhere, the nations of the association of Southeast Asian Nations (ASEAN) are on the move economically. Each has its own national agenda and problems but continued stability - stability in the sense of free and open access to the sea lanes and the maritime trading world - is their primary concern. For the most part - they welcome the US forward-deployed maritime forces and recognize our presence as the key element in the regional security picture — past, present and future.

Finally, our alliance with Australia is very close and should remain an equal partnership based on shared goals and common interests. Australia and our bilateral relationship under the ANZUS Treaty remains a cornerstone of stability and pace in the South Pacific and Southeast Asia. The personal relationships enjoyed between both political and military leaders of our two nations supports the existing strength of Australian-US relations and its bright outlook for the future, while ensuring frank addressal of issues when necessary.

The major thought to be taken from this part of our discussion then is that the Pacific rim is fast becoming the dominant region of the world. From the US perspective, the Pacific is where our technology is today, where our export markets are and where our import providers are located. It is the center of the world's population and it is the region where today's superpowers, US/USSR/JAPAN/PRC, physically meet and where the course of the world's future is most likely to be determined.

Having circled the Pacific rim from a strategic-military perspective, let us now focus on the country which I consider to be the primary security concern to and in the region — the Soviet Union.

The geostrategic lure of the Pacific Century is as appealing to the Soviet Union as it is to the United States. During the last century, Dostoyevsky argued that Asia was Russia's "undiscovered America: a region where its future as a great power ultimately lay." So let me now move to where the focus of our concerns about Pacific security should remain centered — the Soviet Union — a nation with the largest military force in Eurasia.

In a speech at Vladivostok in 1986, Mr Gorbachev signalled somewhat plaintively that the Soviet Union, too, was a Pacific power, and that it would of necessity play more than a secondary role in this new theater of superpower politics. For a country which occupies about one quarter of the Asian land mass, with a tenth of its citizens of Asian descent exclusion from the Pacific century would be yet another indication that its power had peaked and that it was a society in an advanced and perhaps even terminal stage of decline.

Since that speech, the Soviet Union has undertaken a sophisticated diplomatic and economic campaign, buttressed by a strong public relations effort including several arms control proposals, to gain influence and access throughout the Pacific. The moving force behind this increased Soviet attention is the stagnation of the Soviet economy and Gorbachev's ambitious economic modernization program. The capital, manpower and high technology products currently available around the Pacific rim could help modernize the Soviet industrial base and provide needed consumer goods. Soviet leadership knows the region is gaining importance in global politics. They know the Pacific rim could play a vital role in ensuring the future survival of the Soviet State in a world characterized by a technological race in which Soviet industry is not wellequipped to compete. They know that East Asia is a source of venture capital needed to revitalize their stagnant economy. The Soviets have seen the success of western policy. They have seen theirs essentially crumble. They've seen our friends and allies prosper while their's have stagnated. Compare North Korea and Vietnam to South Korea and Thailand. Thus a new Soviet campaign plan, strategy or whatever you want to call it, should come as no surprise.

What does come as a surprise, and, I might add an unpleasant one — is the public relations success the Soviets seem to be enjoying in some quarters. We in America are also faced with budget realities, and, like the Soviets, are doing something about it. A few days ago our Secretary of Defense announced to the world our fifth consecutive declining budget — in real terms that everyone can understand. In just the area of Naval Forces, Congress has been asked to approve decommissioning the Carrier Coral Sea along with 7 destroyers, transfer 10 Frigates to the Reserve, and deactivate 73 ASW Aircraft — in addition to major procurement reductions. These are actions in response to the hard facts of fiscal reality, as is the change in Soviet Military Forces. So recognize both actions for what they are, don't be misled by their public affairs campaign, and don't give the Soviets too much credit as world peacemakers.

A common theme of their campaign portrays Soviet military doctrine as now oriented towards defense and, as such, posing no threat to the countries of the Pacific rim. Secretary Gorbachev's speech in Krasnovarsk last September is usually cited as the centerpiece of the USSR's willingness to reduce tensions in the region. Gorbachev said (I quote) "The Soviet Union will not be increasing ... the number of any type of nuclear weapons in the number of any type of nuclear weapons in the region." (unquote). Shortly thereafter however, the Pacific from its northern fleet, measurably increasing the Soviet submarine-launched ballistic missile force and its capabilities in the Pacific. There are now a total of 17 Delta Class ballistic missile submarines in the Soviet Pacific Flet. Even more recently, they have also moved a Charlie Class Cruise Missile submarine to the Pacific and international media reports indicate a fourth new Akula Class Cruise Missile capable nuclear attack submarine is expected soon.

It has long been a military axiom that you must not get tangled up trying to unravel your opponent's intentions. Instead you must keep your eyes on his capabilities. While we all welcome the good intentions being professed, there is a clear mismatch between Soviet rhetoric and what is actually happening in their fleet. The Soviets claim that since 1985, the size of their Pacific Fleet has been reduced by 55 ships. However, they neglect to say that approximately the same number of more modern ships have been added to their fleet over this same period. And regardless of how one counts the numbers, the Soviet Pacific Fleet remains the largest of its four fleets, and possesses a much more significant offensive capability than it did a few short years ago.

Without a doubt, the Soviets understand and are concerned with seapower. This is evident by their proposals for Naval Arms Controls. These proposals include force reductions, operational constraints, and confidence building measures — all good buzz words. Soviet propaganda has been deliberately exploiting the commonly held perception, or rather exploiting the commonly held perception, or rather misperception, that Naval Forces, by their nature and independence, are inherently destabilizing and threatening.

The United States and Australia are Island Nations which need full and unfettered access to the world's oceans. Our security depends on our ability to maintain the freedom of passage in critical ocean areas and sea lanes, in order to reinforce and sustain alliance forces and for our economic survival.

The Soviet Union, on the other hand, is a land power, physically located on the Eurasian land mass, with contiguous allies and internal lines of communication. The economic interest and the security of our nations depends far more on freedom of the seas than does that of the Soviet Union.

The key to our national security strategy and it's primary objective, the deterrence of war, is our ability to maintain fully capable forwarddeployed naval forces. Since Soviet Naval Arms Control proposals would in fact limit this ability, they are, in reality, inherently destablizing and threatening ... and they pose a threat to the security of the region.

Don't mistake me. No one should discount the importance of Gorbachev's "new openness" in the Soviet Union. But, what it is, what it means, and how long it will last, or in the case of military force reductions, when it will start, is as yet unclear.

To summarize ... as the economic development of the Pacific rim continues to grow, the nations of this region will play an ever increasing role in the world balance of power. With this economic growth, the strategic importance of the region to the security of our two natins and that of our friends and allies has also increased. And despite "Glasnost" and "Perestroika", the significant and capable military forces of the Soviet Union, stationed around the rim, remain our key security concern towards maintaining stability in the region.

While the Pacific Century must ultimately be based on co-operation not competition, I believe the presence of forward-deployed forces has fostered co-operation rather than destructive competition. The Pacific perspective of pece and prosperity is the result of the strength of our regional friendships and alliances.

On that note, I will conclude ... thank you again for your attention and the honour of being the lead speaker in the Vernon Parker Oration Series.



CINC PAC FLT and the President ANI exchange momentos.

BOOK REVIEWS



"THE RED DUSTER AT SEA"

A History of the Merchant Navy During the Second World War by John Slader. Published by William Kimber & Co. Ltd., London. Distributed in Australia by Princeton Books Pty. Ltd., PO Box 24, Cheltenham, Victoria. Reviewed by Vic Jeffery

The story of the British Merchant Service during the Second World War is as glorious as any in the annals of the sea.

Apart from the elements and the appalling conditions in North Russian and Atlantic convoys, merchant ships had to contend with enemy surface vessels, aircraft, mines and submarines. Although mainly German, also Italian and Japanese.

It has been estimated that at least 32,000 merchant seamen lost their lives through carrying out their duty in conveying essential supplies of food and material.

Between September 1939 and May 1945 a total of 2,352 British Registry merchant ships were lost. 1941 saw the highest tally with 717 losses. In December of that year 120 ships went down. In November 1942, 474,606 gross tons of shipping was lost.

The author chronicles the 100's of dramatic events, its successes, its grievous losses, giving the tonnage and number of men lost on each occasion. The book contains an incredible amount of information and data.

When the British troopship LANCASTRIA was bombed and sunk by German aircraft at St. Nazaire on 17 June, 1940 of a total of 5,310 men aboard, 2,833 were lost. The torpedoing of the LACONIA by the German U-156 on 12 September, 1942 some 500 nautical miles off the Liberian coast saw 2,276 (inc. 1793 Italian POW's) perish.

Consisting of 352 pages including 270 pages of narrative, "The Red Duster At Sea" is supported by 55 quality black and white photographs and 15 appendices. Two Australian flavour photographs which caught my eye, were one of the Anzac convoy in the Indian Ocean in 1940 and another of the Orient Line steamships **OTRANTO** and **ORCADES** embarking Australian troops at Sydney in January, 1940.

This book concludes with a fascinating chapter describing author John Slader's own wartime career during which time he was torpedoed and sunk on four occasions.

When one looks at the equipment and supplies sent to Russia on the Murmansk run between 1941-45 the figures are astounding. A random selection shows 7,400 aircraft; 5,200 tanks; 5,000 anti-tank guns; 472,000,000 projectiles; four submarines; nine motor torpedo boats and 14 minesweepers.

The British Merchant Navy and Fishing Fleet received a total of 8,449 honours and awards during the Second World War. Among those were five George Crosses, ten Knighthoods, 50 CBE's, 1,077 OBE's and 1291 MBE's.

As John Slader points out, "the crews were of varied race, varied creeds but the common purpose united them in the face of danger; from the youngest cabin boy to the most weatherbeaten old skipper. All were gallant seamen who acted in the finest tradition of British maritime history".

A remarkable book of immense value to the student of maritime history.

Retails at \$59,95.

THE MANAGEMENT OF CHANGE IN THE DEFENCE ENVIRONMENT

by

*Petronius

There is, in public affairs, no state so bad, provided it has age and stability on its side, that is not preferable to change and disturbance.

Michel de Montaigne 1533-15921

Much of the research that I undertook for this essay was of little assistance, in that current author's writing on management theory discuss the management of change in relation to a specific workplace — a factory or office, for example. Little if anything is written on change as it might effect an organisation of such diversity as *Defence*.

On the other hand, authors of a bygone era were more prolific, if somewhat pessimistic. Richard Hooker, 1554-1600, commented that **Change is not made without inconvenience**, even from worse to better.² The gentleman whose name I have borrowed as a pseudonym has been quoted many times at Staff Colleges and Public Service seminars:

It seems that every time that we were beginning to form up into teams, we would be reorganised. I was to learn later in life that we tend to meet any new situation by reorganising — and a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency and demoralisation.³

Montaigne, quoted on the title page, sums up the attitude of these writers, and exemplifies the reaction to change in most bureaucracies and large, intricate organisations such as Defence — tradition and custom have done us proud in the past, so let us not meddle with the way we are.

An extreme example of the slow pace of change was quoted in one of the current stock of books I looked at, although the author gave no primary source for this information. He alleged that the British created a civil-service job in 1803 calling for a man to stand on the cliffs of Dover with a spy-glass. He was supposed to ring a bell if he saw Napoleon coming. The job was abolished in 1945.⁴

Some Definitions

The potential bellringer had a clearly defined job, but the Defence environment of the title to this essay is not so clear. It could encompass the Navy, since this is a naval competition, all three Services and Defence Central, the strategic envelope in which Australia is enclosed, or even the community that Defence serves. It could equally well encompass all of these, but for my purposes I have limited the topic to the Navy, with the rider that most of what is written could be applied elsewhere.

Change is another wide-ranging term that has to be narrowed to match the length of this essay. It can refer to changing technology, operating systems, weapons, and strategy; other powerful changes that are affecting the way Defence is managing human resources the selection, training, posting and career development of sailors and officers, male and female; then again, Defence is changed by rapidly evolving societal responses to the nature of power - no longer are figures of authority obeyed simply because of their position: followers expect good reasons for doing what they agree to do. I will emphasise the change which is being forced on Defence by the community which it serves, and from which it will draw future human resources.

The final definition needing clarification is that of the agent of change - if we are concerned with the management of change. we have to consider who is doing the changing, or who can effect change. Defence itself can effect change in the way of different policies, procedures and processes, posting patterns, systems of command and control, advances in technology - all those things which are internal and not affected by the environment to any great degree. Unfortunately, the environment does intrude into the Defence environment and forces many changes on an often unreluctant organisation - change is not made without inconvenience. We all recognise the effects of Government policy, be it

The Author Petronius is Commander G. Cutts, RANEM. economic or strategic, and the evolving policies of local nations and the super powers; we may not be so quick in our response to changing cultural attitudes to dress, traditional roles, composition of the workforce, to cite but a few examples. Regardless of the agent, Defence must adapt to changing circumstances, and the first step in the management of change is to recognise the nature of such change.

The Nature of Change

The study of organisational structure has followed a similar path to the study of leadership, another topic close to the hearts of Defence people. Once upon a time, leaders were regarded as born not bred, and the subject was a closed shop depending on the character traits of those ordained to lead. Once a leader, you were always a leader, regardless of the task, situation or the followers; indeed, this is still believed to be the case by many, and it is a topic worthy of pursuit elsewhere in this essay. Current theories stress the situational or contingency approach - leadership is the result of constantly changing forces, and the organisation that will be the most effective will be the one that can match individual skills to individual circumstances.

Similarly, organisations were regarded as closed systems, operating in a stable atmosphere, unaffected by their environment, local or global, as exemplified by the mediaeval guild system which still exists in various guises. The organisation instituted by the founding fathers [founders according to the new Government style manual], was maintained with zeal, and proposals for change were regarded as heretical, or, at best, impetuous. The results of economic depressions, wars, satellite communications et al, has changed most of that, and effective managers realise that

... the task ... is to harmonise their organisation's structure and style with their environment, objectives, and strategy. No one configuration will be problem free. The challenge is to choose the configuration that is to the organisation's best strategic advantage, the configuration with those disadvantages that managers can best manage or cope with.⁵

Greiner's model of organisational growth⁶, indicates that as organisations grow in size and maturity, the general pattern of growth is interrupted by regular crises demanding change. For example, in the initial creativity phase, when an organisation is first forming, the emphasis is on development, informal relations, an entrepreneurial style of manage-

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ment, in which individual personalities have an unusually strong influence; the first crisis occurs when the organisation reaches such a size that the informal methods become unworkable. Consequently, there is a change of direction, and an emphasis on rules and regulations, functional organisation, accounting systems, work standards, and more specialisation.

At the sharp end, frustration sets in, so to resolve this crisis, the organisation then decentralises and delegates powers geographically to lower level managers. The top end keeps out of operational matters, and concerns itself with policy. Eventually, though, the executives realise that they are losing control, so they institute a process of coordination decentralised units are merged, staff personnel institute control and review programmes, capital expenditure is restricted, and **red tape rules, OK?**

Tension between line and staff increases, and rules and regulations interfere with initiative. If the organisation is to survive, a more flexible approach to management has to be derived, and more attention has to be paid to **the needs and expectations of the people** in the organisation. Consequently, a team approach is often developed, head office staffs are reduced and head office acts as a consultant rather than a controller.

Greiner suggests that some of the older and more mature organisations have reached this stage, and the next crisis is about to occur. What will bring it about, and what the next stage will be, is unpredictable. Perhaps the originators of this essay topic believe Defence is in this position now, and they are looking for ideas to enable a smooth transition to the next phase?

Another approach to change, is to view Defence as an open system, one with inputs, processing and outputs, and a control which can modify any or all parts.



OPEN SYSTEM MODEL

The inputs include, amongst others, people who work in the Defence environment, civilian and uniformed; resources in the shape of vehicles, vessels, munitions, accommodation, food etc; and money from the Government to allocate to those people and resources. The Defence process is to transform those inputs into some other shape by training and development, operations, maintenance, R & D and all the other tasks required by the community. The outputs are the return which the community receives — trained people, temporarily or permanently; secure defence; aid in the event of disaster; surveillance of remote areas . . .

Control is exercised internally by a variety of means familiar to all, not the least being quarterly reports and annual performance assessments. Feedback from the nature of the outputs — reasons for resignations, expressed community expectations, results of Government enquiries and committees — generate further controls. Environmental factors are those over which Defence has no control:Government policy, economic and strategic forces, communal attitudes and so on. They can affect any part of the system, and a change to one part has a multiplying effect on others.

The aim of the controlling sub-system is to manage change, to try to maintain a balance between inputs and outputs in an environment which is constantly changing. For example, if there is an increase in the number of people. leaving Defence, then the sub-system has to instigate either a change to the input - more people, or different people - or it has to examine the process - change the conditions of service, or improve job satisfaction. A change in community expectations in a period of prolonged peace leads to a reduction in all three inputs, and a changed process in that the nature of the mission is revised. A change in the currently foreseen strategic environment could lead to an increase in all three inputs, the development of new vessels and weapons, a revised operational emphasis.

Readers will readily appreciate the specific place of Defence, or more particularly the Navy, in these general comments. The idea of Defence as a closed system, immutable in the face of a changing environment, has almost disappeared, though vestiges surface now and then. For example, I am not convinced that officer selection boards and routines for students at the Defence Force Academy are dissimilar to those pertaining when Defence was at Greiner's Phase 1 stage of development. And there are still those who hanker for a return to **good old days** in many areas. Like problems, change can be planned or unplanned. There is not much one can do about the unplanned variety, other than to try to minimise negative consequences, and make the most of any possible benefits. Planned change which results from internal control is more easily managed than that which is imposed by external forces, but in either case there is a tendency to maintain the *status quo* and to resist change even when circumstances warrant it.

Problems in the Defence Environment

The re-organisation so cynically described by Petronius Arbiter on page 2, is only one form of planned change, but the attitude he displays is common to all. Habits, tradition and custom are not only hard to break, they are often upheld for their own sake, as Montaigne implied in his reference to the age and stability of a state. People feel more secure carrying out traditional and routine procedures, preferring predictable outcomes; expectancy theory indicates that previous changes which may have failed, or knowledge of other failures, no matter how unreliable the source, will lead people to believe that future changes will be doomed.

Even a recognition that a change is for the good of the organisation will not imply ready acceptance — people may genuinely fear that they will be unable to learn new tasks and procedures. Alternatively, they may fear for their security, a loss of power and position, maybe even salary or job satisfaction.

These are some of the barriers to change which affect any organisation, but Defence has problems peculiar to itself. For example, it is opposed to change by its very nature - rigid, traditional, hierarchical and bureaucratic. The nature of power in the Defence environment - returning to my former analogy with leadership - has always been classical or ordained, meaning that figures of authority were obeyed simply because they were leaders. We may have excused the need for unquestioned acceptance of orders, and the word is important, on the grounds that we were always training for crises and emergencies when there would be no time for discussion. but we really meant that officers were gentlemen, ordained by the commanding officer, chief of staff and ultimately the king, to wield power over others. Commissions in the RN and RAN, signed by the Queen and the Governor-General respectively, charged and commanded officers to observe and execute ... all such orders as you may receive from us or your superior officers; the former added that

subordinate officers and men were likewise charged and commanded to behave themselves with all due respect and obedience toy you, their suprerior.

Ordained power is in a state of decline in the non-Defence community - witness the attitudes to police, teachers, priests et al. Compliant power means that one wields authority over others only to the extent that they agree to it - supervisors in industry and business are constantly asked these days to explain What right do you have to ask me to do that or Who do you think you are ... This is perhaps one reason why Defence occupies a much more lowly place in the eyes of society than it once did, and certainly explains some of the conflicts which arise between younger and older members of Defence. As the nature of the input changes, so will the processing sub-system have to adapt.

That process is hidebound by tradition and formality. No matter what one's views of the worth of ceremony and custom, newer members see routine procedures through different eyes. They are the product of a society which has undergone some radical changes in the last few years, especially regarding the structure of the workforce and the growth of dominant groups.

In 1984, for example, approximately 51 per cent of the workforce was aged between 15-34 years and those over 60 had declined by nearly 35per cent⁷; these younger officers and sailors were born during the *swinging sixties* and they have been brought up with a different set of values, talents, skills and expectations — managers have to change the emphasis on selection processes, career development, motivation, job satisfaction, mobility for the single and stability for the married. [Remember the days when you had to ask the CO's permission to get married, and you were not allowed to live ashore as a single person?]

The number of women in the workforce since WWI has changed from 22 per cent-44 per cent [1984], with a significant increase in single women and mothers [creches in factories are growing necessities - will Defence have to follow suit?]. The influence of the feminist movement needs no further words, though the results are far from significant: in 1983, 80 per cent of working women were still in clerical jobs, and only 15 per cent were in administrative and executive jobs. Well do I recall the words, said to me within the 80s, of a senior captain in a training position in the Navy, and an air vice-marshal in RAAF personnel, that over their dead bodies would women ever go to sea or ever fly aeroplanes. I shuddered then

that people in senior management positions could be so blind and so biased - I am pleased to say that their bodies are not dead, but I hope they have the grace to be eating humble pie! If the remaining senior managers wear blinkers of similar size, then change will be managed very badly; we will be overtaken by events instead of preparing for them. I have already mentioned the Defence force Academy in one context, but I wonder what are the attitudes therein to women? Enlightened, or a throwback to the old chauvinism with a coating of enlightenment? On the good side, I am pleased to note that there are women at sea, flying planes, and in command of establishments; is the restriction on women's careers, that they are relegated to non-combat positions, going to last for ever, or should we plan for the inevitable[?] change?

Despite the cries for a return to the good old days in education, there have been increased enrolments in both secondary and tertiary institutions; in 1980, more than 50 per cent of the population had attained the highest level in high school or some form of postschool qualification. More years of formal education do not necessarily mean a higher quality of entrant to the Defence environment, but they do mean potential conflict with those who left school at an early age and are now in senior positions having gone through the school of hard knocks. I recall a paper circulating in Navy Office, not that many years ago, asking Directors and above for their views on the applicability of higher education for neval officers [ie, beyond the basic degree]: all but one response ignored the topic and gave their views that naval officers did not need degrees at all.

The implications for the Defence environement are that not only is there a higher need level for low-need jobs, ie, the you need Year 12 now to become a stoker syndrome, but the sailor/officers educational gap is much less than it ever was [and this affects the declining role of ordained power], and because the workforce generally has higher education and skills - it also has higher needs and expectations. This latter point means that managers have to place more emphasis on careere development, job design and job change, or face higher turnover. Managers also have to face the increasing expectation that employers will provide, and certainly not restrict, educational and career opportunities for spouses and children of employees.

What were once minority groups are no longer so, and every group is entitled to and expects a say in the organisation of labour. Salary and tax scales have led to a lessening of the gap between the officers and the sailors, between surgeon lieutenants and seamen captains. There are far more married people in the workforce than ever before — and more divorcees and *de factos*. Affirmation Action, for good or ill, is with us, along with rights for aborigines and the non-smokers. Both the needs and the expectations of all these groups, and others, are rising, ably supported by the law.

Equal Employment Opportunity Act, Sex Discrimination Act, the Administrative Affairs Tribunal [AAT], the Small Claims Courts, Racial Discrimination Acts, Freedom of Information, The Family Law Act, Apprenticeship and Traineeship Acts, Awards, Industrial Relatios, Safety and Health, Pollution, damages, compensation, lawsuits . . . all are civilian changes to the law which impinge directly or indirectly on the Defence environment. The need for secrecy of officers' reports, on the grounds that secrecy was essential for the effective management of the Service, was maintained through several sessions of the AAT, but all to no avail in the long run; senior managers should have realised the way the wind was blowing and faced up to the inevitability of the final decision to release them. A captain worte on an individual's selection report that he gets up my right nostril - we all knew what he meant, but he was advised to be more judicious in his comments. Another told a potential recruit, in jest of course, that if he misbehaved at the Naval College, he would feel the captain's size 15 boot round his bum and find himself doubling round the quarterdeck with a rifle above his head! Cough, cough - not in this day and age, sir; the Defence Force Discipline Act has changed the scene from when you were a cadet.

I ahve already made reference to selection tests and procedures — I wonder how we would stand if any part of the process were really challenged in a court of law by someone who was rejected? Can we justify all our procedures or are we relying on a dangerous game of bluff, hoping we will never be challenged? Do we conduct our selection process in accordance with modern human resources management theories and practices, or are we sticking to the tried and true, the way we have always done it?

The same goes for our appraisal systems, training procedures, terminations of employment. One day, there will be a serious challenge in a court by someone who feels he has beenf airled on a course unfairly, and a lot of dirty washing may be exposed. Perhaps the fastest growing empire in Defence is that of the legal services — it certainly needs to be unless we wish to continue as ostriches.

Although there is evidence that numbers belonging to unions are declining, and no doubt that even the very number of unions is declining, paradoxically, the management structure and ability of those unions is often way ahead of the employer groups. They too have followed Greiner's model of organisational growth, and have perhaps reached, or realised, the crisis points before the employers have. Defence has already experienced the growth of a quasi-union, and no doubt there are many who hope it will wither on the vine; but what if it grows? Professional associations and institutes are unions by another name: they profess to look after the members' knowledge interests rather than their wages and conditions of service, but there is no reason to suppose they can not become more militant in changing circumstances. One the other hand, managers should not see unions, associations and the like as necessarily being opposed to the aims and objectives of the organisation; Greiner's Phase 5 is one of collaboration, simplification of formal systems, and the encouragement of spontaneity and innovation for mutural benefit.

Some Approaches to Change

Accepting the systems approach to the Defence environment, one can deduce that the management of change required by internal imbalances, brought about by developing technology, for example, is not the topic of this essay. We are concerned with the management of change brought about by adjustments in the environment in which Defence operates, particularly the nature of its human input and the expectations of the community which it serves.

Although Greiner theorises that periods of evolutionary growth are punctuated by periods of revolutionary change, I cannot foresee any such requirement on a broad scale. I do not see a monumental reorganisation of Defence following the Canadian system, nor one likely to leas to an overthrow of Government in order to change the inputs to the system. We do, however, need some new paradigms — vogue jargon for some new perspectives.

A paradigm is:

a conceptual framework, a way of looking at the world, a set of assumed categories into which we pile the facts ... Social paradigms seem to change when a new technology coincides with a shift in values or priorities.

The new paradigm then needs its articulate exponent to spell out and legitimise the new assumptions on which we can begin to build a new era of continuous change.⁸

Several authors ahve implied that the new technology is information. Professor Johnson, ex-IBM, former consultant to the World Bank, and now at the University of Adelaide, gave a public lecutre9 at which he pointed out that the agricultural age gave way to the industrial age, and that in turn to the technological age. We are now entering the information age, he said, and we should note the speed at which succeeding ages have arrived - evolution has become revolution, and managers who are not aware of this fact will fail. The implication of the information age for Defence as well as the rest of the community, is that there is greater and faster access to more information for more people - this is changing, and will increasingly change, their needs, wants and expectations.

A recent newspaper article commented on a crisis in middle management. The Managing Director of ICL Training is quoted as saying that not enough is being done to train managers in information technoligy [IT].

The UK spends \$217m a year on training data processing staff but only about 4 per cent of that on training the managers — those who decide on the strategic options facing the company that their IT systems are meant to support.¹⁰

A recent British Institute of Management report is quoted as indicating that three out of five managers believed they needed training in IT and management strategy. A major problem was that IT strategy was often not linked to corporate strategy but operated independently of it — the experience of the Britannia Building Society will be familiar to Defence readers:

Our IT strategy was so poor that we might make a pragmatic decision to do something while elsewhere another decision might be made which could pull in the opposite direction. We needed uniform standards. We were duplicating effort.

Using the information age to advantage, Defence should plan for change by accepting the modern needs for increased communication and participation. A beginning needs to be made by educating all employees about the current situation, and by getting them to think along new lines. Articles need to be written and disseminated, seminars need to be organised [the next ANI Seminar could be offered this essay title as a theme], consultants need to be contracted — Professor Johnson, Professor Handy, Edward de Bono ... —

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Defence and ADFA Fellowships could be utilised, and competitions such as this one should be encouraged. People in Defence need to be made aware of the techniques of information storage, retrieval, analysis, and dissemination — this competition was publicised by signal, the details of entry were contained in a reference quoted by the signal: how many people who were interested or eligible to enter did not have access to either the signal or the reference? A simple example, but it illustrates the change in thinking that is required in more important matters.

This essay cannot be a panacea for the future, but I will attempt to add a few more examples of specific steps that could be taken in planning and even implementing change, even though descent from the general to the specific makes the latter seem trivial.

Following on or concurrent with the educational process, there will be a need for rational problem solving techniques to ascertain precisely where the most important changes are required, and I see one of these as the increased use of personal computers by managers in the field.

Professor Johnson feels that in the near future, some 90 per cent of manager's problems will be handled by computer. Most of the problems faced by the average manager are routine and programmed, ideal for solution by computer model; unplanned problems are the ones that require human creativity and initiative, and managers will have more time to devote to their solutions. Routine reports, requests and procedures should all be computerised, which does not mean there will be no scope for human input. The implications, he says, are that managers will need to be generalists rather than specialists, for the solving of non-routine problems involves the manager adopting a broad outlook on the possibilities.

Another consequence of the increasing use of computers to solve routine problems, is that thee will be need for fewer levels of managers in organisations of the future - perhaps Defence needs to look again at its rank and specialisation structures, a revolutionary rather than evolutionary change. In the immediate future, I can see a need for a management and administration branch composed of information specialists: the old days of COs' positions being restricted to seamen officers have long since gone, but there is still a pressing need for some rationalisation of COs' billets. Either we formally train all officers of commander rank, say, as management specialists, along the lines recommended by the managing director of ICL, or we employ generalists COs ably supported by senior bursars and registrars, to use a university example. The former would manage the financial and inventory information, and the latter would manage the administrative and legal information. The triumvirate model has much to recommend it as long as we train the COs in the advantages of group decision-making. The growth of the legal services indicates that the role of CO is neither for the untrained specialist, nor the fainthearted! Maybe the very title of *Commanding Officer* needs a change? [Chief Executive Officer is becoming widespread in the business community.]

As part of this new emphasis on management techniques, I would see a need to restrucutre the personnel policies and organisation of Defence to bring them into line with the changed community. Chiefs of Personnel, for example should become Chiefs of Human Resources Management - and the abbreviation CHRM, pronounced CHARM, should be a publicity gimmick to reflect the leaning towards participative management. A more revolutionary change could be n line with forecasts by Professor handy, who suggests that the contract between man and organisation may be due for a change.11 He says that the costs and bureaucracy of employment are such that many organisations have realised that they can save enormous amounts by contracting work out - the organisation avoids overheads and responsibilities, the organisation can concentrate on quality of product/service and not having to worry as much about morale and conditions of service, and the relationship between employer and employee becomes an adult-adult relationship.

This is a reference to transactional analysis, the implication being that organisations based on ordained power and with performance appraisal systems such as those operating in Defence, tend to be parent-child relationships; in the contractual system, unsatisfactory work is just not accepted. This is felt to be a more acceptable statement than the criticism of a superior or senior manager that one's work is not up to standard.12 I suggested in the previous essay competition that Defence should consider using the services of the Reserves in this manner; there must be much work at base and HQ level that is discrete and could be adequately handled by specialist Reserves, operating as individuals or as groups.

Another aspect of contractual labour is to develop the system of short service contracts for sailors and officers. The core force is

reduced and because you wish to retain them for a long time, you expend considerable effort on training them and ensuring their conditions of service are more than adequate, their jobs more important and more highly rewarded but as a small force, that becomes cost effective. You do not concern yourself to the same degree with the contract labour - in this case, people who join for a short period to complete a specific job or role. We already do this with doctors and dentists, so it should not be too difficult to expand the scheme in all directions, as we would if national service were re-introduced. Give the contract labour minimum training, minimum gear, adequate food and shelter, plenty of recreational opportunity

... The t rend in the workforce today is for mobility, not stability; if you apply for a job having spent more than five year with your last employer, they wonder where your sense of advanture and initiative is — no ambition, no drive, no good to our company.

The cost to Defence is not only that it will take a radical change of direction, but that more time will need to be spent on selection of the core force, and more effort will need to be devoted to planning, programming and contract setting. Even the core force may need a restructure of the working life -- the information age is leading to an ability of many workers not only to work flextime, but also to work at home, some via computer and modem. The Victorian work ethic, the White Anglo-Saxon Protestant leadership theory, and the naval 0800-1600 day are antiquities, hard though that may seem for some of the traditionalists! Not that it means the demise of the darg13; job satisfaction perhaps means more to the current batch of young employees than it did to some of the older ones who entered Defence for a variety of reasons. Entering for a fixed contract of two years, does not mean that you will put in less effort than someone who enters for a career.

Conclusion

The management of change is easier said than done, in any environment. In an organisation as large and diverse as Defence, the problems facing a smaller, more compact organisation are increased enormously. Unplanned change gives us no options — we sink or swim; there is no time for planning, so we cut our losses and make the most of what is forced on us. Planned change implies that people of vision can look ahead and analyse changes in the external environment that will one day impact on the organisation — so steps are taken to prepare for that day. In the case of Defence, planned change is required to take cognizance of changes which have already and are now occurring in that environment; we still have the opportunity to look ahead and plan for the future, but if the move is not made soon, we will be overtaken by events and planned change will become unplanned change — crisis management as it is known.

Defence may be viewed as a system of inputs and outputs, with external changes modifying both: in particular, the people joining have different attitudes, skills and values, whereas the community receiving the service Defence provides also has different expectations from a decade ago. All organisations find there are severe difficulties involved when trying to implement change, but Defence has additional problems, not the least being its traditional, bureaucratic and hierarchical nature — features which were its strength in years gone by, but features whicha re now in conflict with community trends.

Resolution of this conflict will need a new paradigm, some lateral thinking, good communication, and a willingness to adapt. There needs to be an emphasis on the people element of the organisation, with new attitudes to traditional roles and work patterns.

No one likes to be at the receiving end of a bureaucracy ... Time was when the disaffected could do little about it, but the advent of hijack power has meant that those at the receiving end have negative power at least equal to the positive power of those at the other end.¹⁴

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- 7. Figures from Robbins, p 3 +
- 8. Handy, p 389
- The Centre, Gold Coast, 27th September 1988, for Bond University.
- The Australian, 25 October 1988, quoting from an article in The Times.
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- 12. Handy, p 399.
- 13. An old coalmining term meaning an honest day's work for an honest day's pay; the ability to work hard when unsupervised.
- 14. Handy, p 392

THE SIGNIFICANCE OF SECURE SLOCS FOR THE NATIONS IN THE WESTERN PACIFIC

by Shin Kanemaru

President, Japanese Center for Strategic Studies

Ladies and Gentlemen

It is of great significance that the 6th International SLOC Conference, sponsored by the Australian Defence Association and the Institute of Public Affairs, is held in this commemorative year of the bicentennial of the Australian foundation, and at the point when the Soviet Union signed the INF Treaty with the United States and has started to withdraw its forces from Afghanistan, while in the Middle East the long lasting Iran-Iraq war has reached a truce, all of which indicates that world situations seem to be changing greatly.

First of all, I would like to express my heartful gratitude and respect to the members of the Australian side and of the International Steering Committee who organised and prepared this conference so well. It is my great pleasure and honour to be given this opportunity at the very beginning of this conference, to sum up the political and strategic problems covered by the previous conferences, stressing the significance of secure sea lanes of communications for the nations in the Western Pacific and to express some of my personal views about it.

It is generally recognised that the signing of the INF Treaty is the result of military increases of the United States aimed at a "powerful America" and the coincidental support of the Western bloc toward the United States' energetic efforts to abolish intermediate nuclear forces. The signing of the INF Treaty has given the peoples of the West a hope that it may become a milestone toward a comprehensive arms control. However, it is undeniable that coupled with the skillful peace offensive by the Soviet Union, it has also created a detente mood among the peoples of the West. Hence, such a question as "Why should we endeavour to secure out sea lanes of communications, when the world situation is moving toward a detente?" may be raised.

However, it goes without saying that the balance between the East and the West, in

terms of tactical nuclear forces and conventional military forces will become far more important after the abolition of INF. In this respect, the Western nations, being inferior in conventional military forces, should cooperate to strengthen their own conventional military forces, as well as decrease the unbalance of both the East and the West in an asymmetrical manner, so as to maintain the balance at a lower level. However, it is not so easy to realise, as we actually see that the USSR, while it is very active in carrying out a peace offensive, continues to increase its military power in the Far East, especially the Pacific Fleet and the air forces, quantitatively as well as qualitatively. What it implies in relation to the security of the SLOCs is very serious.

Through the past five International SLOC conferences, we have reached basic agreement on the significance of securing the safety of the SLOCs and the necessity of our cooperation for that purpose. Let me give you the essential points of our agreement: First, the freedom and safety of the sea lanes, i.e., SLOCs, must be secured, as it is vitally important for the existence and development of Western Pacific nations. We, the countries in the Western Pacific, being geopolitically sea powers, have achieved tremendous economic development after the War under the free economic system; living standards of the people have improved; so that the next century will be called the Pacific era. With economic development and the improvement in living standards, trade of necessary fuel resources, raw materials, food and industrial goods has increased. Since most of these goods are transported by sea, securing the freedom and safety of the SLOCs has become all the more important.

Secondly, another important objective of the defence of the SLOCs is to safeguard sea

Keynote Address Presented at the 6th International SLOC Conference in Melbourne, October 11, 1988. transportation of personnel and material necessary for the continuation of defence, in case of emergencies, and to contribute to securing the safety and freedom of action for operating naval forces. This is because the security of our Western Pacific nations is supported by the military support and cooperation of the United States, and the threat from the Soviet submarines and heavy bombers in the Western Pacific has been increasing.

Thirdly, improvement of our SLOCs defence system is an important part in the deterrent of a major war. The maritime strategy of the United States is highly significant in terms of a deterrent to a major war, and it is indispensable for securing the safety and freedom of action of the U.S. naval forces as well as sea transportation of military personnel and supplies. In the case of a major war, it would be considerably protracted, and it is necessary to secure the supply from abroad of fuel, raw materials, and other necessary goods for the survival of the peoples and the continuation of defence.

Fourthly, defence of SLOCs, extending over such wide sea areas, cannot be achieved by any nation alone, however powerful it might be. The mutual co-operation among related nations in some form or another is necessary. However, establishing a collective defence system like NATO in the areas of the East Asia and the Western Pacific seems to be impossible in the foreseeable future; therefore, how to resolve this problem is an important political and military task for us.

I have so far summarised the significance of securing the SLOCs and the necessity of co-operation among the Western Pacific nations, in which basic agreement was reached through the past International SLOC conferences. I would like to add a few words, in this context, on the significance and problems of our defence effort of the SLOCs in the Northeast Asia and the Northwest Pacific subregion.

First, the sea areas extending approximately 1000 nautical miles from Japan, not only south of the Japanese islands, but also east of them, is the most important as well as the most dangerous for the safety and security of not only our SLOCs but also the East Asian countries. The SLOCs of our three nations in the northeast Asia, that is Japan, the Republic of Korea and the Republic of China, converge in this area, and the US Naval operating forces coming to help the defence efforts of the northeast Asian nations, pass through or

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operate in this area. As this area is close to the Soviet naval bases, too, this area may be said to be a good operational area for Soviet submarines and heavy bombers, and it is this area that they must pass through in order to extend their operations.

Next, it goes without saying that the defence of three straits around Japan is essential not only for the safety of SLOCs in the Western Pacific, but also for the security of the East Asian areas. However, securing the Japanese islands and the southern half of Korean peninsula is a premise of the defence of the three straits. In this regard, we should pay attention to the remarkable increase of the Soviet sea control capabilities, including the Pacific fleet's major surface combat vessels and submarines and cruising missiles carried on board them. These would indicate that the USSR intends to secure control of the Seas of Japan and Okhotsk as well as the areas around the Kurile Islands and Kamchatka Peninsula, and to expand the controlling areas' even further toward the northwestern Pacific. The defence of Japanese and Korean territories, including the three straits around Japan. is the premise of defence of sea lanes in the ocean, and we now face more serious threats than ever before. Accordingly, I would like to point out that strengthening the defence capabilities not only of land territories but also against aircraft, surface vessels and submarines operating in the Sea of Japan as well as anti-surface missiles to be fired from them. is now a more important and serious problem.

As a result of the improved performances of submarines, increased number of heavy bombers such as backfire, and improved performances of air-to-surface missiles mounted on them, the defence of the SLOCs in the Western Pacific has become more complicated and difficult. It should be especially noticed that in addition to antisubmarine warfare operations, the air defence of vessels on the seas has become a new and grave problem.

Lastly, it is said that the next century is the Pacific era. The countries surrounding the Pacific and the island nations in the Pacific basin are connected with each other by sea lanes.

Therefore, the safety and prosperity of the countries in the Pacific sphere depend upon the safety of the SLOCs in the Pacific or the maritime security. However, in order to maintain this security, mutual co-operation among the countries in this sphere is indispensable. Through our past conferences, we have come to a general agreement on the significance of the security of the SLOCs and the necessity for co-operation among the countries concerned in order to maintain it. As I understand it, the ultimate objective of this conference is to discuss practical methods needed for implementation under the existing political and strategic situations, recommend the result of such discussion to our respective governments, and appeal to the peoples. It is a welcome advance, I believe, that many concrete problems are taken up for discussion at this conference. In concluding my address, I do hope that this conference will contribute to the promotion of further mutual cooperation among the countries concerned in the coming Pacific era.

Thank you for your attention.



The Royal Australian Navy's new \$17.5m submarine escape training facility located at HMAS STIRLING in Western Australia. The facility was commissioned on April 22, 1988. Photo: LSPH W McBride, RAN



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FUTURE MILITARY COMMUNICATIONS - SOME PERCEPTIONS

by Roy E. Kane

I welcome this opportunity to address a group of military communicators and I approach the task with both enthusiasm and some trepidation. Enthusiasm, because I would like to share with you some of the perceptions that we, in the research environment have for military communications of the future. Trepidation, because I am aware of the wealth of operational skills and field experience that you have collectively in the Services and with which we in the laboratories may not as familiar as perhaps we should be.

I am confident that we share the same goals, that is to ensure that Australian Defence Communications are as effective and as efficient as the country can afford, it is vital that we each recognise and respect the roles we have to play in achieving that goal and that we don't waste resources by believing that we 'know it all' and don't have to consult others.

Our work in the laboratories cannot be justified unless it properly focuses on real requirements of the ADF (albeit sometimes very long term requirements). On the other hand, I respectfully suggest that your work won't be as effective as it could be unless you are prepared to recognise that there are people such as my laboratory staff who have skills and knowledge that you don't have, which must be harnessed in the earliest stages of the development of requirements and concepts.

Before I indulge in some crystal ball gazing and give you some insight into future concepts for military communications allow me to be a little provocative and share with you some concerns I have. Firstly, I do not believe that we have got the communications planning function right in Defence. The policy is in place at the highest level in the Defence of Australia 1987. But flowing from that there needs to be high level planning. And by that I don't mean that we can sit down once and for all and write a Defence Communications plan and set it down on a tablet of stone. What I mean is that we should have, built into the organisational structure, a planning function which is dynamic, alert to change (in strategy, strategic circumstances, technological changes etc.) and quick to react to change. As an example, Telecom which has had to respond to major change due to deregulation, funding changes, technological change and its need to become more business oriented, now has such a planning function. We would do well to learn from them.

Communications programs take a long time and a lot of money to gestate, develop and implement. Programs such as DISCON, PARAKEET, AUSTACCS, were developed many years ago and since then there has been very significant change in the intervening period. I am not convinced that we have taken sufficient account of that change — primarily because we do not have the planning function I spoke of.

All of your organisations are busy; I am sure you are all overloaded with pressing day-today and short term problems. I am equally sure you are all doing a good job and I am sure that in some ways all or some of you are contributing a great deal to planning. But, I suggest, we could all benefit by a much better established planning function.

Where should that planning function be performed and by whom? This is where I will probably get into hot water because it is not my role as a laboratory man to be telling Central Office how to organise it's business. However, having raised the matter I think I am obliged to offer a personal opinion, at least.

I believe we have a fair way to go in implementing the Joint Command Structure. I believe that in Communications, as in other mattes, there is still a considerable momentum for single service programs and single service considerations. I therefore believe that the planning function must be a HQADF or Defence Central function — at least for strategic planning of strategic communications. However, although I do not have time

This article, comprises the 'Mercury Luncheon' address to Communicators at RAAF Fairbairn on 15th March 1989

to pursue the theme here, it is my view that the distinction between strategic and tactical communications is rapidly diminishing. I said a 'HQDF or Defence Central' function because I wish to sidestep the Military Vs Civilian control issue. My point is that it must be a centralised and joint function — not a single service function. Further, it must involve all of the important players, the ADF, the civil communications industry, R&D laboratories such as the advanced engineering laboratory, functions such as Force Development and Analysis (FDA) and Strategic and International Policy (SIP) and obviously, the departmental funding authorities.

Further — and this will probably cause you some outrage — I do not believe that the communications planning function should be driven by those who are traditionally known as 'communicators'. WHY? The answer to that question will lead me in to some of my perceptions of the future of military communications and some crystal ball gazing.

It is my view that we need to begin to view communications as being there not as a means of passing compressed messages from say, Commander to his 2IC or for passing a cryptic message from the battlefield to HQ but as an essential element of a total Command, Control, Communications and Intelligence (C³I) system. Therefore, with the greatest of respect for DGJCE, who I hope I can still call a friend after this, I believe we need a planning function which is called C³I rather than C-E.

With the advent of vastly improved computing machinery and much wider bandwidth communications I believe we are already in an era when we can contemplate:

- distributed sensor systems, e.g. OTH-RADAR, Surveillance RAdars, AEWACS, P3-Cs, tactical ESM assets etc.;
- distributed data bases (for logistics, intelligence); and
- a distributed and flexible command and control support system.

Why shouldn't the Commander be able to walk into any major node of such a distributed system (e.g. Canberra, Sydney, Melbourne, Tindal, Darwin, Pearce) and peform his command function in exactly the same manner as he would in his own headquarters? Why shouldn't he be able to choose to hand over his command to an alternate or subordinate commander in another place with the knowledge that the alternate has the same facilities at his disposal as he himself had? Is all this affordable or achievable? To be candid, I am not sure, but I think it may be.

- the invention and subsequent installation by the civil communications industry of fibre optic cable has caused a quantum leap in the bandwidth and capacity of trunk systems;
- broadband ISDN [B-ISDN, Fast packet switching or asynchronus transfer mode (ATM)] will bring unprecedented switching speed, flexible routing and marked increases in survivability and durability in the network;
- the equipment for these command and control support systems consists essentially of work stations (not DESINE terminals) which have substantial memory capacities, considerable processing capabilities, good interconnectability, well established station to station communications protocols, and good display capabilities — and the price is continuing to fall; and
- the system is essentially a software system.

It is relatively easy to buy a large number of intelligent work stations and network them — it is the software which is the system.

There are, of course, a number of alligators in the swamps — some of them large and voracious. One of the biggest challenges is that of security. It is probably impractical to protect a distributed broad-band network with end to end encryption. We have to learn how to implement multi-level security (MLS) at very high levels of security — and we don't know how to do that yet. We have to:

- develop the design methodology and testing methodology for 'trusted systems software';
- buy or develop the tools which will speed up (and hence cut the costs of) software development; and
- develop the discipline of 'reusable' software so that we don't write and re-write the same software for each application.

There are some other alligators which may not be quite so obvious. Are we going to persist with the doctrinal approach that we avoid overload of our commanders by denying them information or by allowing the capacity of the data links to limit the information which can be made available to them? Or are we going to find more intelligent ways of presenting him with the information he needs whilst making available to him all that is available should he want it? Are we mature enough in our thinking to accept that data bases, sensor data,

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intelligence data should be available to a range of levels in the command structure? Or are we going to ensure that it is locked up so tight that it is of little use in real time?

Why have I ended up talking about C³I systems when I am addressing a luncheon or communicators? Because I am firmly of the belief that a change of approach is required in communications planning if we are to provide appropriate systems to support the ADF into the next century. Communications must be seen in the context of supporting C³I structures. I believe the distributed C³I approach offers some very substantial opportunities for Australia as a whole — not only for Defence.

Australia has a good reputation for innovation and has a growing capacity for innovative software development. Too often have we procured systems from overseas which do not meet our purposes, for which the design and structure of the software is not availale and which bluntly do not work. Here we have the opportunity to develop a truly self-reliant National capability which meets our requirement.

We must put into place a dynamic, capable and quick reacting planning function. We must study and plan how our joint command structure will work and put into place the doctrinal basis for it. From that top level planning will flow the requirements for our C³I systems.

We must also study and research the risk areas — security, trustworthiness etc. Collectively, we must do much better than the essentially bottom-up approach we are taking now. I look forward to working with you towards putting into place the communications systems which will support the C³I systems we will need in the twenty-first century.

The Author

Roy Kane began his professional career at the Weapons Research Establishment, Salisbury, South Australia, in 1960 following graduation as Bachelor of Engineering from the University of Queensland. He first worked on rocket and aerodynamic test vehicle instrumentation, a field in which he gained further experience during an exchange visit to NASA. Langley Research Centre, Va. USA in 1968-69. Mr Kane has since worked in a variety of fields of electronic engineering, including data acqusition and control systems for wind tunnels, Over-The-Horizon high frequency radar, electronic warfare systems and communications systems. He was appointed to the position of Superintendent, Communications and Electronic Engineering Division of the Advanced Engineering Laboratory in 1985 and, following restructuring of DSTO, took up his current position as Chief Communications Division, Electronic Research Laboratory in 1987.



Launching of HMAS MELBOURNE Photo: ABPH Kym Decener

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COMBINING TWO PROFESSIONS: THE MILITARY ENGINEER

by

Lieutenant Commander Zakir Rahmani, MSc, MEd, RANEM

Introduction

Times have changed, and so has the military professional in a fundamental manner. Rapid technological changes are having a dramatic impact on the world of today. Technology is making advances in many walks of life medicine, computers, electronics, engineering to name but a few. Today, both civilian and military organizations face major challenges in exploiting the potential of new technology. The accelerating pace of technology has affected the overall strategic resources of the military organization. The advent of missile and electronic warfare and increased automation. in weapons systems have already affected many of the elements of combat effectiveness including its force structure based on human resources. Automation and increased technology has led to a reduction of the overall manpower but the skills and educational background required of these persons have increased dramatically. This technological revolution has shifted the emphasis of officers make up from that of 'pure' military-specialists to officers with strong technical/engineering backgrounds. Increasing demands on officers with technical background has resulted in the engineering branches of the three services examining critically their function and role.

A number of reviews and studies (e.g. Hugonnet, 1982; Purcell, 1984; Frost, 1986) were conducted separately by the services on structure and personnel management. Unfortunately these studies were conducted in isolation. There has been no interaction between the three services and no study has been conducted on specific attitudes of engineers even though they are becoming the most valuable assets in the armed forces.

The study reported here was started in 1986 and represents the first full-scale study of military engineers to include tertiary, as well as non-tertiary technical officers, of the Navy, Army and Air Force. The study examined engineering professional socialization in terms of technical quality, practical orientation, social responsibility, professional values and ethics and satisfaction with the profession, all of which are considered important for success as an engineer (Anderson, Carpenter, Western *et al* 1987). Service behaviour was examined in terms of career involvement, career motivation, career prospects, career intention, military values and ethics, spouse involvement, and job satisfaction (Jans, 1988). The factors believed to be important for an officer's success such as managerial quality, adaptability, intellectual style, foresight and analytical skill were also examined.

The data gathering strategy was based on survey methodology. In the middle of 1986 over 2600 survey booklets were sent to engineering/technical officers of the Australian Armed Forces. The survey included officers from under-training to one star level. An overall response rate of 89 per cent was achieved. The present study focussed on three main issues: Induction, Commitment and Assimilation. These are described briefly along with the findings of the study.

Induction

The induction phase i.e. entry into the profession was studied in terms of three associated factors — the age at which the initial decision was made, the issues which influenced that decision and finally the stereotype images of the successful professional that may have influenced the decision making process.

In the case of military engineers the induction process is two-fold: one into the engineering profession, and the other into the Armed Forces.

The Decisional Age

In the induction process the age at which the initial decision to become an engineer as well as to join the services took place plays a significant role. Engineering officers were asked, during the survey, about ages when they first considered becoming an engineer. The data indicated that 6 per cent of the population surveyed made the decision at the age of 10 years or younger, and at the age of 17 some 80 per cent of the respondents were potential engineers. The overall mean age at which respondents decided to study engineering was 16 years with a standard deviation of 4.4.

The respondents were also asked to identify the age at which the decision to join the Armed Forces was first made. The data, indicated that the overall mean service decisional age was 15 years with a standard deviation of 3.4. About 11 per cent decided to join the services at age 10 years or younger. A majority of 98 per cent, nearly all those who joined, decided to make service in the Armed Forces their chosen career at ages younger than 22 years. It is interesting to note that the decision to join the military was taken about one year earlier than the decision to become an engineer.

Factors Affecting the Decision

In the present study engineers were asked about motivation, influences, experiences and socializing catalysts which may have influenced their decision to study engineering and to join the military. This was done by means of a set of 12 items. Engineers were asked to rate these items on a 'very strong influence' to 'not at all influence' scale. Among the items the four factors most frequently endorsed as a reason for studying engineering were:

Important to Very Important' Interest in subject matter

Desire for a professional career	91%
Desire to practice engineering	77%
Interest in making things	72%

91%

The factors relating to engineering orientation appeared to be, in the main, the initial socialization factors in the decision making stage. Availability of paid training and financial attractiveness also rated fairly highly on the importance scale. On the other hand, the four least important factors were:

 'Important to Very Important'

 Social status in the community
 27%

 Parental influence
 26%

 Desire to go to university but with
 0

 no strong preference for any
 21%

 Desire to be independent of bosses
 19%

Social status of engineers is one of the least important indicators affecting their decision. A number of respondents made some comments in the questionnaire, against this item, such as 'you must be joking!', or 'my wife's plumber considers himself an engineer and has more status in the community than a professional engineer'.

Among the most important factors affecting their decisions to join the military were:

'Important to Very Important'

Job which offers challenge, variety	
and travel	85%
To improve and better myself	84%
To get a steady job and pay	69%
To make the military my career	66%

The reason 'To make the military my career' was the fourth most important cited. The least influential factors were:

The least innuential factors were

1	important to Very Important	
	Parental influences	24%
	To have status in the community	24%
	Failure to obtain suitable	
	employment elsewhere	5%
	To get short term employment	
	while searching for suitable	
	civilian employment	3%

Again, as with choosing the engineering profession, the reason 'To have status in the community' was one of the factors least affecting the decision to join the military.

Profile for a Successful Engineer and Officer

It has been argued in the literature of professional socialization that in making career decisions one is influenced by the stereotype of a particular occupation and the process of career choice is making oneself match this ideal image.

The respondents were presented with a set of 30 statements and were asked to rate them from 'Very Important' to 'Not At All Important'. The following items represent the percentage of those who rated a set of characteristics as 'Very Important' for a successful engineer. In order to isolate the strongest possible characteristics it was decided to use only the 'Very Important' response as a pointer. Over 50 per cent response rate was considered of significance.

'Very Important'	
Ability to analyse a situation	
logically	82%
Thorough knowledge of the	
subject matter of speciality	67%
Being able to communicate ideas	65%
Ability to transform ideas into	
practice	61%

The trend was consistent over time (length of service) and indicates a profile of a successful engineer which is task and professionally oriented. It is worthy of note that over 60 per cent of the engineers surveyed indicated that these characteristics were 'very important' for a successful engineer.

As was done for the successful engineer profile, it was decided to examine the respondents' perception of the make-up of a successful officer. The same items, which were used to examine the successful engineering profile, were rated in terms of a successful officer profile.

The results are as follows:

Respondents' perception of the make-up of a successful officer:

'Very Important'	
Ability to gain the respect and	
confidence of the men	84%
Ability to control and lead men	84%
High standard of honesty and	
integrity	82%
Being able to communicate ideas	81%
Managerial skills	70%
Ability to analyse a situation or	
problem logically	68%
High administrative ability	60%
Wisdom and maturity of outlook	60%
An appearance of confidence	60%
An interest in people	53%
Ability to get on well with	
colleagues	51%

Overall, 11 characteristics with an approval rating of over 50 per cent were recognized. The trend was consistent and indicated a profile for a successful officer, one which is leadership and managerial oriented. Having surveyed attitudes to the induction process the study then assessed the commitment phase.

Commitment

Military commissioned engineers, doctors, lawyers and teachers, among others, carry out activities which enable them to be differentiated from military-specialist officers in terms of their primary occupational role. For militaryspecialist officers the successful implementation of their role is dependent on the experience, skill and knowledge gained within the organization and not those acquired outside the employing body. These militaryspecialist officers possess certain basic military skills which are exclusive to the operation of the organization.

In addition the military also employs engineers who are basically recruited on their civilian status and skills but are expected to be trained in military skills within the organization to a standard equivalent to those of military-specialist officers. Their status, reward and promotion basically depend on their military related skill and roles and they compete against military-specialist officers to gain high ranking appointments. In the military context, career progression is more likely to be based on contribution to military achievement rather than to technical accomplishment. Thus there is much more potential for conflict, dissatisfaction and strain for an engineer commissioned in the military than those employed in large civilian organizations.

The jobs military engineers do are very varied, as are the environments in which they work from one posting to the next. Thus one would expect levels of ambiguity and conflict to vary considerably from one job to another. Although many engineering officers begin their careers in a technical capacity poor career management pushes many of them reluctantly into the general area of military speciality. Some of them make considerable adjustment into this dual role of military officer and engineer and cope with the conflicting demands. Others may opt for one career path being either engineering or military depending upon the strength of their commitment. This study examined the dual roles of engineering officers, their strength of commitment, and their aspirations towards engineering and military careers.

Three types of engineering officers were identified in terms of their career preferences.

First — the military officer

These officers are psychologically involved with and motivated towards their military careers. They are strong on military commitments and low on engineering involvement.

Second - the ambivalent officer

These officers are ambivalent and do not have a strong preference for one type of career. They are not fully committed to either and prefer a career which provides them with the opportunity to practice engineering skills as well as military duties.

Third — the engineering officer

These officers are those involved with and psychologically motivated towards the engineering profession — they are not strong on military commitment.

The data indicated a variation in percentage of officers belonging to the three categories with respect to their service.

	Total No.	Military	Ambivalent	Engineer
Navy	442	11%	53%	36%
Army - RAE	279	49%	37%	14%
- RAEME	216	45%	43%	12%
- RASIGS	87	60%	32%	8%
Air Force	793	16%	53%	31%

Table 1. Distribution of Respondents into Three Categories of Officers

 $x^2 = 28.37;$ Df = 8; p < .001

Eleven per cent of the Naval engineering officers belong to the strong military and 36 per cent belong to the strong engineering commitment categories. Whereas about half of the respondents (53 per cent) show no strong preference to either type. The trends were similar for Air Force engineering officers but there were slightly lower number of officers belonging to the engineering category and slightly more to the military. However, the distribution for Army Engineers was quite different. Among all Army engineers about half (49 per cent) had a strong military commitment and only 12 per cent indicated a strong engineering commitment. The differences were also apparent among the three corps of Army engineers. A majority of RASIGS (60 per cent) were committed to the military and only a small number (8 per cent) were committed to engineering careers whereas about 47 per cent of RAE and RAEME were committed to military and about 13 per cent committed to engineering careers. Thus the majority of army engineers (especially RASIGS) are strongly committed to military careers.

Rank is significantly related to career priority. The percentage of officers with strong military commitment increases with rank. Only 10 per cent of officers under-training had strong military commitment while 32 per cent had strong engineering commitment. For the senior ranks, equivalent to Navy Captain and above, 52 per cent of officers were strongly committed to the military, only 10 per cent to engineering.

Figure 1 indicates that the change-over point, that is the time when the percentage of officers change from a strong engineering priority to a strong military priority take place between the Navy's equivalent to Lieutenant and Lieutenant Commander ranks.

It is estimated that somewhere in the middle to senior Lieutenant seniority level the commitments to the military and to engineering are in balance. This is the most critical point in the engineering officer's career. At this time the decision to leave the engineering career and to adopt a military career is made. Perhaps those who do not wish to compromise their engineering orientation with military leave the services at this stage. That levels of stress and individual career preference may determine retention and assimilation is briefly examined below.



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Assimilation

Assimilation in this study was viewed in terms of intention to stay in the military. The factors which influence an officer's intention to stay or to leave were examined.

Contrary to common media belief the data did not reveal any significant differences between resignation intention and economic orientation, (i.e. where an officer considers that serving beyond 20 years would be a financial disadvantage).

The data did not support the contention that engineering officers who want to leave the military are leaving to gain financial benefits at the 20 years point. The data also did not support that 'lack of spouse involvement' and 'concern with children's education' were the main cause of their high resignation intention.

Also the level of job satisfaction was not a significant predictor in determining resignation intention although career involvements of both types, military and engineering, were significantly related to intention to resign. However, the results signified the importance of career management and career prospects in the determination of resignation intention. Length of service, marital status and personality on neuroticism trait were also significantly related to resignation intention.

'Lack of career management' was one of the most important issues among all other issues of concern. Over 80 percent of junior to middle ranking officers expressed their great concern about the lack of career planning by the management. Even 70 percent of senior officers (equivalent to Navy's captains and commodores) expressed their dissatisfaction with career management.

When asked the question 'I am confident that my service has a career plan for me' only 10 percent agree from 'Fairly Strongly to Strongly'. Similarly on other types of management issues there was a considerably lack of satisfaction among the respondents.

Conclusion

The data indicated that there is a mismatch between self-selection and career involvement. In the military, career involvement is not selforientated. It is basically dependent on management selection of his/her career involvement in a particular job. This mismatch of self selection and job orientation was one of the main reasons for resignations. The data indicated that high resignation intention was found in those with high priority to engineering and with low level of engineering job involvement. These factors were significant in determining the resignation intention for officers with less than 20 years of service but not for officers with more than 20 years of service. Whereas older groups of officers were both relatively more military orientated and placed less importance on performing engineering types of jobs; this may have been due to a 'self selection' process whereby those officers of the same age group who thought otherwise would have already left.

Finally the data in general highlighted that a low level of assimilation is achieved by not managing people. The organization lacks career management and the selection of jobs to suit individuals' career orientation. Assimilation of trained personnel in the military from the organizational point of view is very important. In terms of economics, manpower is the largest item in the defence budget. This money cannot be efficiently used unless the organization retains its trained manpower, especially officers and technical staff. An organization through its indoctrination process develops its workers in tune with operational value. During the life time of its workers an effective organization enforces the positive aspects of individual careers in the organization. Unfortunately the military lacks this effectiveness. In the majority of cases career management is a random sequence of events. Conflicts and stress start to emerge when individual values and career aspirations are completely out of phase with the career management by the organization. The results are clear. The military in the coming years will need flexibility in its approach to personnel management.

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HMAS MORESBY, one of the Royal Australian Navy's quiet achievers seen departing HMAS STIRLING in Western Australia on another northwest survey season. The Newcastle built hydrographic survey ship celebrates her 25th birthday on March 6, 1989. Photo: Navy Public Relations (WA)

FAREWELL SPEECH

by

Commodore A.R. Cummins, AO, RAN

Held at the Canberra Club, 3rd February, 1989

Admiral Beaumont, Ladies and Gentlemen.

Thank you indeed for the honour of a fine farewell. Your kind words have been most touching and I am somewhat humbled.

Last year the word reached me that half the people here today are here to have a good time at a well organised party and that the other half are here to see that I've actually left. Well I have, so everyone can now enjoy the party!

I really don't know where the last 39 years have gone. It has always been a challenge and most always fun. I have been very fortunate in the people I've had the privilege of working with, particularly in the last few years. There are too many to thank again individually this evening, but I would like to mention six people of particular note to me personally:

- Brigadier Pat Gowans who worked at Service Conditions and I think made some inroads in areas where Australian Servicemen had been done down for decades.
- The second is Mr Bill Taubert whose loyalty, vast knowledge and experience, for far longer than I can remember, has contributed so much to Navy Office Financial Planning. He took me aside when I first came to Navy Office as a Lieutenant in 1963, put me right and told me true. I hold him in the highest regard. We have been firm friends for more than quarter of a century.
- Then there is Captain Chris Skinner, whose energy, drive, enthusiasm and real professional engineering talent was largely responsible for getting the Anzac Frigate Project off the ground and running so well — a huge contribution to Australian Defence and Industry.
- We really need to recognise and understand the absolutely unique and exceptional scientific and engineering work done by Mr Mike Turner at the Materials Research Laboratory, Pyrmont. I was delighted to see his recent Defence Science Inaugural Award. His inventions in the field of minesweeping have to be seen alongside the invention of sonar as a technological breakthrough in maritime warfare. The benefits will be enormous for

Australia and our allies. The cost savings alone for current Australian programmes must be well over two thousand million dollars.

- Mike Turner's concepts would not have been brought ahead so quickly if it had not been for the brilliant Project Management skills of Commander Owen Culley who was able to manage to time and budget a complex technical and operational programme, which came from the amalgamation of some 23 separate projects. The Navy and the country have a lot to thank these two men for.
- The sixth is Mrs Vicki Ferrett, who represents all that is best in the Australian Public Service. She came from High School to be my Secretary at Naval Warfare in February 1984: learned, thrived, slaved, survived, married and continues after five frenetic years of working on the planning for the largest peacetime expansion the Navy has ever seen.

Service in the Navy is total dedication to the security and well being of Australia. Stand up and be counted. State clearly what you believe, provide professional advice without fear or favour, always. Firmly and clearly repeat it if necessary. Do not be fobbed off, and do not be put down by bureaucratic clap-trap. Our ships and aircraft must be armed to do the job and our men trained to win in combat. This is the basis of continuing peace.

Loyalty must run both ways; insist on it and practise it.

There is no place for the lazy, slow, untrained or incompetent. Further, there is no place for the selfish, self serving or opportunistic individual. You must guard carefully and work assiduously to support and encourage the real qualities of leadership upon which the Navy so much depends. It is a fragile organisation when leadership falters, more so perhaps than the other two services and other institutions of our country.

Unfortunately at present, there is a growing number of opportunistic 'street smart' individuals at almost all of the levels in the Navy. There is no place for them. The strength and worth of the Navy can only be kept where our community expects it if these inadequate people are **not** seen to advance themselves, thus their example will not be followed.

Strive for excellence, seek challenge, have great vision for the Navy and our country. Australia must have a powerful, balanced Navy, with air power at sea. We live in a region with a larger potential for instability than a few years ago and the risks are increasing.

An area of problem, but honest problem, is the management of Navy's manpower and personnel. Frankly, it's a little muddled and moth eaten, at a time when it must be consistent, imaginative and farsighted. Admiral Hudson needs all the support he can get to put it right, restore confidence, engender respect to enable the ever growing number of outstanding officers and sailors to excel in the service of Australia.

I have said enough. You expected me, I'm sure, to be straightforward. I have really enjoyed my first career and look forward to the fun, exhilaration and challenge of the second and then third careers.

Every great service is supported by its families. The Navy family is doubly important. I would like to thank and pay special tribute to our parents, wives and children, who endlessly support the Navy in so many ways. I would like to give my heartfelt thanks to my wife Deidre who has tirelessly supported the Navy for 32 years.

In conclusion, we all need to recognise what the Navy is about. It is not as well understood as it should be for a maritime nation. State it, repeat it, explain it, and then do so all over again. Our Navy is for:

- the defence of our trade;
- keeping the peace;
- guarding our sovereignty; and is
- the principal arm of Australia's foreign policy.

Strive for excellence in serving Australia in the Navy and may God be with you all. Thank you.



HMAS OXLEY, the first submarine to be home-ported in Western Australia departing from HMAS STIRLING on deployment. Photo: Navy Public Relations (WA)

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NAVY'S SHORE INFRASTRUCTURE FOR THE TWENTY-FIRST CENTURY - THE LOGISTIC VIEW

by

Rear Admiral I. McL. Crawford, AM, RANEM

"Defence self-reliance demands a defence force capable of independent operations. Fundamental to this capacity are appropriately sited bases, effective logistic arrangements, and the scientific and industrial ability to select, adapt, repair, maintain and develop defence equipment." (The Defence of Australia 1987 — Government White Paper)

"... amateurs discuss tactics.... professional soldiers discuss logistics." (Tom Clancy: Red Storm Rising)

During the past three decades to my certain knowledge, and probably earlier, battalions of military and civilian functionaries have descended on locations around the Australian coast to assess their suitability for naval infrastructure. Important considerations have been the physical characteristics of space, current land use, depth of water, the effect of the elements of wind and tide and other environmental issues. Operational and political factors were usually the influences initiating the studies, but which of these have taken precedence is often debatable. Logistic factors, however, have not always been given the recognition that they deserve to influence the selection of the location or the configuration of the facilities. Yet in the Australian environment these logistic factors are of critical importance to those overworked shibboleths of the bureaucracy, effectiveness and efficiency.

Beause the Royal Australian Navy will play an increasing role in Australia's national strategies for the twenty-first century, covering not only the defence of national interests, but just as importantly the projection of Australia's image throughout the Asia Pacific economic region, we need to be certain that we have been exhaustive in our consideration of those factors which should influence the location and configuration of the shore infrastructure. This paper examines some considerations with a particular slant towards logistic factors. Some current concepts and practices should be thought through again to take account of logistics, not as an afterthought but as one of the principal determinants.

Through a process of examining the various levels of logistic support and identifying factors which influence location and configuration this paper suggests a structured hierarchy of logistics from the operational ship to the main base.

Some logistic issues are often overlooked because of narrow sectional interests. Of even greater concern many logistic issues do not receive their appropriate value because of the failure to integrate adequately the logistic factors into strategic infrastructure planning. "Motherhood", is a natural reaction as the reader progresses through the factors but it is surprising how frequently in recent years infrastructure planning has proceeded without addressing the logistic factors as determinants.

This should not be surprising because military planning has frequently overlooked the logistic factors. Yet in the strategic circumstances of a country such as Australia, the vast land and ocean areas and relatively small population require defence solutions which need to draw heavily on the effectiveness of logistic support in order to optimise a necessarily limited order of battle.

The cost of defence infrastructure is such that we need to extend our innovatory skills beyond conventional military planning in order to find the solution appropriate to our unique circumstances, recognising that logistic factors can often influence strategic and operational processes. Modern logistic management in industry, technological developments (particularly information technology) and lifestyle trends all need to be brought into planning consideration. The ideas of multifunction polis (MFP) are relevant to the defence community and in some respects some of the notions in this paper are consistent with the MFP concepts, allowing Navy to move forward with trends in our society. Only in this way can the RAN remain relevant to modern society while retaining those traditional characteristics which must endure in a Service where the unexpected dangers of the sea and the enemy

will continue as a part of the normal environment with which it is expected to cope.

The shore infrastructure has become increasingly important to modern navies. Beyond the policy level of ministries and departments, the needs of functional command and control, training and material support can only be accommodated in a complex and coordinated structure of shore bases.

These roles and functions of the shore infrastructure are unlikely to change but the emphasis on particular activities and their distribution between seagoing units and shore establishments are likely to vary with the dynamic development of different concepts of operations and support. Traditional role descriptions such as teeth and tail, sharp end and rear echelon are coming under increasing challenge as the unity of operational activity, its control and its support is recognised as a factor in successfully meeting objectives.

Training will continue as an important shore infrastructure activity. The realism that can be generated by simulators will increasingly provide scope to prepare the seagoing or airborne operators for their working environment under conditions which are controlled to optimise training and are less costly for the same product. But the importance of experiencing the real and unforgiving environment with its inherent dangers and discomfort for which there is no time-tabled relief are an indispensable conditioning for all those who participate in operations, their control and their support. The right balance between shore training and seagoing experience must ensure that the different requirements of operators, controllers and supporters are met in the right measure.

Typical of the factors which need to be acknowledged and accepted as influencing optimisation of infrastructure development and involving changed concepts of management are the arrangements for maritime surveillance and control.

Control of maritime operations from a landbased headquarters has progressed to the stage where only local tactical control is assumed by a shipborne commander. It can be expected that control capacity will continue to develop with the increased demands on and improved performance of communications, operational data transmission and presentation, sensors and remote control of platforms and weapon release.

This is already proceeding in the Maritime Headquarters concept, but can it be taken any further to writing still more advantage from improved technology or improved management arrangements? The cost of investment in hardware and software, facilities and trained operators to achieve a wide range of capabilities and the need to optimise performance by orchestrating all resources must place in question Australia's separate maritime surveillance and control endeavours. The risk of coverage gaps and failure to disseminate critical information is always present in separate control. The co-ordination and concentration of effort, so necessary for optimising maritime control, can be facilitated by collocation of traditional naval and coastguard activities, noting that segregation is possible where security is an issue.

The resource cost of a separate maritime surveillance and control through 'penny packet' arrangements seems to run counter to the Commonwealth Government's commitment to efficiency. For the efficient use of resources as well as enhancing peacetime and wartime national maritime operations, therefore, Australia's naval and coast guard type activities need to be considered for rationalisation under the mone management and operational control.

This seemingly indulgent and irrelevant diversion in a paper on logistic factors influencing infrastructure reveals the scope for the logisticians' perspective to identify scope for efficiencies and to influence strategic judgements. There are many other current examples.

The Logistic Factors

Maintenance and supply support integrated in a logistic environment are functions which are constantly being subjected to review and revision. The scope for change is almost endless. Unless we set logistic goals and determine philosophies which can be accepted as contributing to achievable corporate goals, there will be no stable foundation on which to base the associated infrastructure development. In the following paragraphs I shall discuss important factors influencing logistic goals for the RAN which in turn relate to infrastructure planning, taking account of the Navy's role as an element of the Australian Defence Force and as a part of the community of Australia.

In a country such as a Australia with its small population relative to its size, the force available for deployment could be overstretched in meeting commitments in our area of strategic interest unless deliberate measures are taken to enhance availability for operations. The logistic factors are at least as important as any others and there is the evidence of



C Sydney

Navy's main support base inextricably linked to the nation's civilian industry infrastructure. Within the Navy's structure there is scope for greater efficiency through an integrated logistic and administrative support system.



Jervis Bay

Indispensable for workup, training and main support base ammunitioning but does it meet logistic criteria for an operating base? A compromise amongst conflicting factors? history that shows that in the final analysis it is the material condition of forces influenced by the effectiveness of logistics that decides strategic issues. The optimisation of the provision for the intended right material condition is a question of balance noting that excessive resources can detract from other priority goals while too few can restrict the flexibility of command options, whether these be at the national strategic or tactical level.

Sadly the logistic factors influencing infrastructure development do not all lead to the same solution and they vary in their relevance and values among different circumstances. Infrastructure planning would be facilitated if all logistic factors conveniently supported the same solution or had the same value but clearly there need to be trade-offs amongst conflicting factors. The factors are discussed in a way that is not intended to assign any priority or to treat each factor definitively, since the detail will vary according to the task to be performed. The discussion starts, however, from the priority of responsiveness to forces committed to operations.

The purpose of logistic support whether ashore or afloat, and also taking account of approved organic capabilities, is to sustain a deployed force to meet strategic goals. This means in the case of operational units, the right mix of approved ship characteristics and manning to provide trained personnel, spares, tools, test equipment and workshop space to allow the ship to meet its approved usage/upkeep plan dependent only on external replenishment of fuel, ammunition and victuals. In addition, the lessons of history, and recent history at that, show the need for the approved ship characteristics, manning and outfitting to incorporate capability and capacity to undertake some breakdown maintenance and battle damage repair in order to minimise the need for ships to withdraw from the area of operations.

Having ensured that ship characteristics maximise availability for operations, the next consideration is to locate and configure the external logistic support to contribute to the same criteria of maximising availability. The paper proceeds through a hierarchy of stages progressing from the effective response of combat logistics to the optimised economics of national logistics.

The Afloat Support Option

Even though this paper is devoted to shore facilities the afloat support option needs to be considered to ensure completeness in the

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coverage of the continuum of logistic support. An important principle which is particularly relevant in Australia's area of strategic interest. is that the flexibility of deployment of operational seagoing forces, independent of the constraints of logistic support from fixed shore facilities, will be enhanced by the use of afloat support to the optimum extent feasible. The term afloat support covers the full range of mobile capabilities to replenish, maintain and repair operational units, proceeding from the front line support of the Underway Replenishment Group, through the support ships providing mobile base facilities in anchorages. to the freighting support of dedicated and converted liquid and solid cargo carriers.

The use of alfoat support in contingency planning and in peacetime employment ensures its readiness for contingencies while contributing to the efficiency of peacetime tasking. The question could be asked whether this factor has influenced the design of Australia's merchant ships. In recent years the answer is probably no. While the decision to acquire a second afloat support ship is a good step in the right direction, the full mobile capability needs to be examined ranging from the purpose designed military vessel to the contingency availability of modified merchant ships.

Forward Logistic Support Facilities

Having met the requirements of alfoat support from naval ships in service and from earmarked merchant ships to the extent required by strategic and logistic considerations, the balance of logistic support needs to be met from shore facilities located and developed to complement organic and mobile support, in a way that takes account of standard logistic factors. Responsiveness is the key factor but there are other issues.

Passage time to replenish, repair or maintain when these activities cannot be accomplished while continuing to meet operational tasks reduces the available order of battle almost as effectively as incarcerating ships in a dry dock. To the extent that other factors permit, facilities providing logistic support should be located as close to the area of operations as possible in order to minimise operational ineffectiveness attributable to logistics.

There are conflicting forces at work here because an important consideration is the vulnerability of forward logistic support facilities and assets to a capricious or preemptive strike recognising that it is not possible to protect these assets in peace with the same level of forces that would be available after the commencement of hostilities. The loss of the assets should be a calculated risk as the price for immediate readiness in a potential area of operations. As a basis for calculating the risk, stocks should be no more than those necessary to support forces deployed to meet the short warning time threat until re-supply can be activated.

Because of the criterion of readiness, Single Service Logistics Management (SSLM) of stocks and therefore of the facilities is not an important factor and may well militate against the optimum location to meet this criterion. One philosophy is that material which is intended to permit immediate response to a contingency should remain under dedicated Service management.

The facilities factor from this logistic factor, therefore, is that storage requirements for contingency stocks at forward bases need be no greater than what is needed to meet the initial increased tempo of operations until resupply takes over. What is required, however, is storage that can withstand climate, weather and fauna effects when turnover of stocks may not be able to ensure continued serviceability. Clearly, however, turnover is also a factor that must be included in planning.

Movement

Movement is a factor which pervades all planning for base location and configuration. It is introduced appropriately here as the link between the operational influences of combat units and forward support bases and the economic influences of the national industrial support base. It will be mentioned again in the discussion of the characteristics of particular bases.

The need for transition from one environment to the other is one of the main determinants of logistic judgements and decisions. These involve such considerations as movement time to optimise operational availability. minimisation of exposure to hostile interdiction, exploiting economies of scale and use of national environment and the facilities to break from the economic bulk of the long haul to requirements of operational handling. Tradeoffs are involved but clearly the transformation from one configuration of transport to another can only be achieved at an intermediate base located and configured expressly to take account of a wide range of strategic, operational, logistic and economic factors.

The Intermediate Logistic Base

In this next part, therefore, we examine the logistic requirements that influence the

configuration of facilities that link the forward bases to the national industrial infrastructure.

The needs of locating logistic assets to minimise withdrawal from tasks for logistic support, configured to levels and capabilities which can minimise losses to pre-emptive enemy action or deterioration while ensuring calculable levels of readiness, have been stated as fundamental determinants. These considerations are incompatible, however, with the high level of dependence on the national industrial infrastructure where for sound strategic and economic reasons the Services' main support bases are located. The role of the intermediate base in providing for the interface between the bulk product of the national infrastructure and unit packages and services appropriate to operational units have already been mentioned.

Location of these intermediate facilities is as important a consideration as for the forward bases and again the factor of forward re-supply is critical because of response time and the need to use scarce, purpose designed assets capable of carrying stocks into the combat environment and evacuating repairable equipment. Trade-offs become more complex and there is also the considerations of whether commercial services would enter the area of operations.

These trade-offs include the cost of protecting the lines of re-supply from the national industry infrastructure. In a country like Australia, however, where the routes from the southern industrial base to the northern areas of operations are not unacceptably exposed, except in a high intensity threat, the cost in operational assets of pushing logistic support infrastructure forward is probably not excessive.

The ability to make efficient use of transport assets for re-supply from the nation's industry is therefore an important factor in locating and configuring intermediate bases. The reliability of transport becomes even more important the longer the haul and the more vulnerable the re-supply route to interdiction by weather, climate, enemy action, sabotage and attrition of vehicles, traffic route and infrastructure. For this long haul a capability to exploit the bulk carriage of material by sea is an important factor calling for a secure seaport with a full range of cargo handling equipment including the scope to handle ammunition. The characteristics of the different modes of transport lines of communication, road, rail, air and sea and never overlooking pipelines, require a careful evaluation of the civil infrastructure including its capacity to handle planned entry



C Port Hedland

Would an afloat support investment provide a better solution than a North West base, taking the support to the ships rather than bringing the ships to the support? Probably we need both ship and base in the long term.



Darwin

Trade-offs between logistic readiness and vulnerability of facilities and assets.

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and exit rates. These evaluations should not overlook shipments for commerce and the civil community whose continued functioning may well be the key issue in the contingency.

The distribution of ammunition facilities is a particular judgement which needs to take account of the principles outlined in this paper. Ammunition and other explosives are a strong influence on the location and configuration of intermediate bases as they are critical combat stores not generally available from the civil infrastructure and create special difficulties for transportation and storage. They should be incorporated in the intermediate base area structure.

Security is of vital importance for these intermediate bases in the light of the infrastructure and stock investment established for the purposee of enhancing forward supply and responsiveness to forward base needs. Strategic and threat assessments will be factors contributing to the desired location to meet criteria of security.

Because of the cost of security, joint bases collocated with the relevant civilian infrastructure make efficient use of area defence and re-supply route protection assets. This concentration facilities SSLM which can be projected to forward bases for replenishment of prepositioned stocks and recovery of repairable equipment.

These intermediate bases could not be developed within the warning time to respond to shorter timescale warning threats if we are to have in place the infrastructure and stocks needed for the support of forward bases and afloat support ships. These bases then should exist in peacetime and indeed there are also sound strategic and operational reasons why we should develop intermediate bases for peacetime tasks and training, for conditioning our forces to the likely operational environment and for testing material and standard operating procedures.

The characteristics of these intermediate bases are such that families would be expected to accompany permanently based operational and logistic support units. They would also provide a rest and rehabilitation location to rest operational units whether permanently based there or not. A high standard of accommodation and recreational facilities appropriate to the environment and national standards is needed. Given the joint nature of these intermediate bases a high level of SSLM for Service and family accommodation and recreation should be sought. An underlying principle is that the facilities should be essential to the task to be performed, ruthlessly eliminating non-essentials. This does not mean that the facilities need to be universally austere. Under certain criteria such as the provision of recreation facilities or accommodation for ships' companies of dependent seagoing units and for families particularly in remote areas, a high standard of comfort is important to maintain the quality of life, morale and a physical and mental preparedness for demanding activities.

In applying the criteria discussed in this paper to the location and configuration of forward and intermediate bases it is important that the operational concept and its logistic support are modelled to ensure the optimum arrangements to meet the objectives. Australia cannot afford less than optimum logistic support.

Main Support Base Considerations

The arrangement of logistic support within the main support base and industrial area of southern Australia has imporant implications for the effectiveness of the support to forward and intermediate bases, the efficient use of resources and the configuration of the infrastructure. Location is not a difficult issue since it is inevitable that Navy's concentration of logistic effort will be influenced by the close interdependence of refit, repair, supply, civilian industry, government facilities and work-up areas. The balance between what is provided from the main support base area and from the intermediate base is, however, important. It involves questions of readiness, responsiveness to logistic contingencies and the efficient use of resources.

The ability to meet these criteria has been facilitated by modern information technology. For example, the inventory need no longer be centrally located and staged to operational units through a hierarchy of bases each replenished by a higher echelon, with the delays and stockholding excesses that that involves.

With on-line visibility of inventory and other conventions possible through enhanced information systems, a total shore infrastructure inventory can be managed from a national control point. Distribution decisions can be more responsive to ship deployments and maintenance activities and overall management can be modified to provide scope for local purchase and control, direct supply to customers from commercial suppliers, controlled stock for contingencies and projects, command over-ride and SSLM of both inventory





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and activities, always mindful, however, of the priority of readiness.

Other considerations related to the economic management of the inventory and therefore influencing the logistic facilities include the cost and benefits of volume purchase, shipment and warehousing associated with an extensive, dispersed inventory, assessed against the costs and benefits of procurement and premium transport for a contingent service from a centralised inventory. The criteria and alternatives are well beyond the scope of this paper but what is clear is that they cannot be considered in a general application to the entire inventory. Within an overall policy, a range of economic and operational factors and trade-offs, subjected to management judgement, must be applied on a case by case basis.

The product of planning in accordance with an overall inventory policy is necessary to allow infrastructure planning to proceed but this need not delay the progressive development of the infrastructure. A start can be made immediately on initial nucleus warehousing at intermediate and forward bases in accordance with the criteria for the location of these bases. Inventory dispersal will evolve over time as the information technology permits the use of management conventions that will optimise inventory and its location.

Information technology also offers opportunities for improved management within main support bases and intermediate logistic bases. Units established within these base areas require logistic and administrative support to allow them to meet their functions. Traditionally many of these functions have been met organisationally from within the unit in a way that reflects the self-contained character of major war vessels. The question must be asked whether this continues to be relevant in the modern environment for peace and war.

A more appropriate arrangement, using an extended local area information network, is to manage logistic and administrative support functions centrally, providing services to units as out-stations of a single command. There is no good reason why in the Sydney area, for example, HMA ships KUTTABUL, PEN-GUIN and WATSON should continue as separate independent commands. Their training and other functional activities are not affected by the source of the administrative or logistic support provided they are all accountable to the same command authority. A local area network permits the speedy exchange of detailed and authoritative information to permit centralised management of remote activities.

In other countries, the separate command and support of independent shore establishments are becoming conventions of a past era. One could even contemplate a rationalisation of logistic and administration support to the operational bases of *HMAS PLATYPUS* and *HMAS WATERHEN* from the same sources as *PENGUIN, WATSON* and *KUTTABUL* and it could be taken even further given the technology available in modern information systems and the scope to define command and management relationships. A better use of resources would result without any reduction in effectiveness, indeed there is reason to believe that effectiveness could be enhanced.

This paper has touched on some issues which to date do not seem to have played an important role in infrastructure planning. They are essentially of a logistic nature and they are additional to the many other factors which have influenced infrastructure planning in the past. The important messages that can be drawn from this paper are:

- Australia cannot afford less than optimum arrangement of functions and activities particularly where there are cost penalties for infrastructure and logistics;
- logistics must aim to optimise the availability of operational units in the area of operations;
- afloat support offers advantages of flexibility and responsiveness;
- in a simple hierarchy of bases there is a need to translate the logistic support from the economies of scale of the national industrial infrastructure to responsiveness of support to operational units;
- the location of forward and intermediate logistic bases has important implications for responsiveness and, by extension, strategic outcomes;
- vulnerability to hostile acts, deterioration of inventory and logistic response times are important considerations influencing the configuration of logistics and their infrastructure at forward bases;
- intermediate logistic bases need to be purpose designed, taking account of existing civil infrastructure and the scope for rationalisation amongst the Services in order to make the transition from national to operational logistics; they should be established for their contingency role and used as peacetime bases for the deployment of contingency forces and force training; and
- the exploitation of modern logistics management conventions and information technology and sensible rationalisation to enhance the effectiveness and efficiency of logistics will influence the associated infrastructure.

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TOP LEVEL ORGANISATION IN A WARSHIP - IS IT SACROSANT

by

Commander David Shackleton

'The time has come', the Walrus said, 'To talk of many things: Of shoes — and ships — and sealing wax — Of cabbages — and kings — And why the sea is boiling hot and whether pigs have wings.

Louiss Carroll — Through the Looking-Glass

INTRODUCTION

Evolution of the top level organisation in a warship is one which moves slowly, in fact its rate of progress is such that the changes made over the last 10 years are rather hard to detect. There have been extensive organisational reviews of Headquarters and functional areas resulting in major changes to the way we do business, but the framework which forms the top level organisation in a warship has received scant attention. Such a state of affairs might indicate that, like some gunnery theories, the arrangement is perpetual and hallowed by the test of time. Alternatively, it is peered at as if through a looking-glass, and is one of the favourite means of living in a fantasy.

Since introduction of the PWO concept for the seamen sub-specialist warfare officer, there have been changes to the WEE branch terms of reference as well as those of the ME branch. For the WEE branch this was orginally precipitated by the introduction of DDGs, and then later and more dramatically by acquisition of the NCDS and the expanded need for WEE personnel to cope with an ever increasing amont of electronic equipment. For the stokers, they have been less dynamic, and have to be content with the transfer from the Green Empire of power generation and distribution. The Supply branch has discovered computers and taken control of the national buzz word generator, but overall that department has not evolved in a recognisable fashion in terms of ship organisation. But the Seaman branch has nothing to be particularly pleased with so far as innovation is concerned. Evolution past the PWO has not been achieved since the role of the Executive Officer as second-in-command has remained one of being a ship coordinator,

and irrespective of his role as head of the seaman branch, organisationally displaced from the warfare officers in supporting the command.

Despite the aim of keeping the peace, the purpose of a warship is to be able to fight and win when called upon. This article will concentrate on the top level organisation of a warship, examine how planning, coordination and execution of objectives set by the Captain are achieved and propose some changes that will permit a greater likelihood of success should push come to shove. The assumption is made that a second-incommand is necessary and that an officer is required to coordinate ship activities to meet those objectives.

WHAT'S THE PROBLEM?

The present arrangement of the departmental organisation of a typical destroyer is depicted at Figure 1. While it is accepted that there may be some differences between each ship or class of ship, such as those with embarked aircraft, they are not regarded as significant for the purposes of representation. Each head of department is responsible to the Captain for the provision of professional specialist advice and the efficient and effective functioning of that department, but the PWOs are double hatted in that they report direct to the Captain for their sub-specialist responsibilities in warfare and to the Executive Officer for remaining departmental matters. Ship coordination of departmental activities is exercised by the Executive Officer who is the chairman of the weekly planning committee and supported by the Operations Officer for that task. The Operations Officer ostensibly produces the draft agenda in the form of a Shortcast, after receiving bids (theoretically) from each department as to how they will both satisfy externally applied commitments, and meet internal objectives for maintenance, training and other requirements applicable at the time.

Having prepared the weekly plan, it is then



SHIP ORGANISATION

(AS TYPICALLY USED BY RAN

FOR DEPARTMENT AND SUB DEPARTMENT ARRANGEMENTS)

LEGEND

PERSONAL RESPONSIBILITY TO COMMANDING OFFICER

DEPARTMENTAL RESPONSIBILITIES TO HEAD OF DEPARTMENT

(THERE WILL BE MINOR DIFFERENCES BETWEEN SHIPS TO TAKE ADVANTAGE OF INDIVIDUAL SKILLS AND PERSONALITIES)

changed to accommodate those gremlins which appear from outer space and various Headquarters which have so much fun in turning the plan into a bowl of spaghetti. But as is widely known, the purpose of having a plan is so that it can be changed.

This is an appropriate time to review the key players in the top level organisation and assess the strengths and weaknesses of the arrangement.

Executive Officers are supersonic, all weather, multi-role, low flying, terrain following officers. They have to be if they are to be the second in command, and by default, the Chief of Staff and principal advisor. While leading and managing their own department, they must also ensure that a ship's NBCD and training organisation is effective, as well as coordinating the whole ship internal activities of other departments. He must do this latter task because the Operations Officer firstly is not authorised to do so, and secondly is himself probably too busy trying to learn his own professional skills and keep up with the Captain's requirements for various exercises and plans he wants looked after. But changes to the external programme have the inevitable effect of changing the internal programme, and usually vice-versa, which by present design are managed by the two different officers.

Being second-in-command in the RAN is guite a lot different to being Vice-President of the USA. The position requires that the Executive Officer stay in touch with the full range of matters handled by the Captain and be able to take command should the need arise. This should not mean that he gets an early night every night at sea just in case the Captain gets blown away after being hit by an enemy missile, or feels a little weary, but he must stay up with the Captain's thinking and views on how things should happen; such an existence is also beneficial to other heads of departments and to the ship's company at large. Those responsibilities the Executive Officer holds should allow him to assume command, either temporarily or permanently, without resulting in other personnel having to carry him while he finds his feet. As a consequence, he has a need to stay current on warfare matters.

Conventional wisdom would suggest that those officers who succeed as Executive Officers have a better chance of achieving destroyer command than those who do not. This article is not about the rights or wrongs, or even the probabilities associated with this observation. Rather, the point is that when the Commanding Officer is fighting the ship it is important that he be as up to date as possible on tactical matters, not so that he can do the PWO's job for him, but so that he can more effectively get the PWO to do what he wants. This line then suggests that he would have benefitted by keeping current in warfare during his time as an Executive Officer, where his previous experience as a PWO should have allowed him to have overcome a willingness to recite the book solution, and instead be able to plan and execute innovative plans while being the Captain's senior warfare advisor.

The Weapons Electrical Engineering Officer (WEEO) is responsible for the ship's material ability to actually be a warship. His skills are vital for the provision of working sensors and weapons to the users, and indeed some of his men operate the same equipment, which has led to thoughts by some of moving more to a user/maintainer concept for operation of the new generation of equipment. Like the Supply Officer, the WEEO is well supported by senior sailors as heads of each section who contribute to the achievement of the WEEO's overall responsibilities.

Modern weapon systems have become more integrated in the sense that the weapon and the guidance system are matched from the outset in design, and then (hopefully) improved over the years. This has led the WEEO now to be responsible as an 'authorised officer' in terms of the management of explosives for missiles and torpedoes. The Executive Officer presently remains responsible overall for explosive safety and the ASW and Gunnery Officers are nominated as 'authorised officers' for those explosives in their charge. While there is some merit in Seaman officers retaining the responsibility for their unique explosives, it can be argued that the WEEO is well supported in training and departmental expertise terms, and is a suitable candidate to also assume responsibilities for the whole ship management of explosives.

The Marine Engineering Officer (MEO) is by nature quiet and reserved (although some have been known to be different), he is the expert of all things metallurgical and has irrefutable evidence that it is his department which allows the ship to go to sea at its whim. He is responsible for two of the three pillars of ship's company morale — fresh water and the laundry — and presently has one of the most arduous and personally demanding training paths to become qualified.

His training and experience in operating and maintaining machinery, hull preservation and ship stability make him well suited to advising the command on damage limitation and repairs which affect the ability of the ship to float and move. Marine Engineering department sailors man the key damage control positions at action and defence stations and they are the first to become involved in such matters. This factor however does not in any way diminish the need for all sailors and officers to be capable of participating in saving the ship.

The MEO has responsibilities for the ship's damage control material preparedness and assists in training all of the ship's company in damage control matters, but the present reason for the Executive Officer retaining overall responsibility for NBCD is the whole ship coordinative nature of the problem. NBCD is undoubtedly a whole ship problem; it requires every member of the ship's company to know how to react and participate in saving the ship or people from the devastation at hand. But this question of where the responsibility for its implementation should lie has been around for some time — should it be the MEO or the XO — and it is tricky.

The precedent set over the years in Naval culture has been that responsibility should generally lie with the officer who has the greatest degree of knowledge and skills in achieving the objective. This article suggests that for damage control such an individual does not need to be second-in-comand. There is obviously a need for inter-departmental liaison and cooperation to ensure that standards are met, and it would be a sorry Executive Officer who could not reasonably respond to a complaint by the MEO to the Captain that personnel training standards were unsatisfactory, or that the MEO's responsibility for NBCD was being given insufficient attention in the overall planning process.

The Supply Officer is the guru of intricacies associated with the electronic transfer of funds, and is the ship's expert at creative accounting; he is the only officer formally schooled in the mysticism of financial regulations and delegations and because of this he is indispensable. He is also responsible for the provision of vast quantities of nutritious, attractive and edible food, the third of the three essential pillars supporting morale in a ship. He manages the stores for the ship and, with the Captain's assistance, has a close interest in administrative work conducted by the ship's office.

His department is unique in its specialist diversity which militates against interchangeability between responsible areas, which in turn creates difficulties when the ship is underborne for any particular reason. But a strength of the departmental organisation is a generally high ratio of senior sailors to the juniors, which permits the Supply Officer to monitor, manage

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and direct as necessary to achieve his results. Because of the high degree of delegation possible in the department, there would appear to be time available in a Supply Officers average day to devote to other whole ship activities, as befits a head of department. As an officer who already has responsibilities for hygiene, there would seem to be no good reason why the Supply Officer, with the requisite work force, should not accept responsibilities for the ship's internal cleanliness.

This task of hotel management, heads and bathrooms, call it what you like, is far from the least important job in the ship. There is a very real need for all branches and categories to understand that not only do they contribute to making a mess, they help to clean it up. There is a requirement therefore to ensure that the officer with overall responsibility for the task is able to plan and implement the task effectively and has access to the command.

In these days of trying to centralise and streamline administrative work, not to mention using the Government credit card wherever possible, it seems strange that the Coxswain remains responsible for arranging personnel travel and having custody of the leave details for members of the ship's company. Again this would appear to be the result of long and devoted service, but a task which is now however, more appropriate for the Supply Officer to take on.

The task of the Operations Officer is not well defined in RAN documentation and, by and large, it is up to the Captain to decide the scope of his terms of reference. But other than exercise planning and acting as the coordinator of PWO efforts in planning, he has no responsibility for overseeing the professional standards of other PWO's and, except for his own specialist responsibilities, has limited rights of coordination with the WE department. Particularly when he is undergoing his first sea going consolidation posting after his SWO training, the novice PWO is trying to learn his own specialisation and the task of being an effective Operations Officer (as it should be) can become onerous. At present, the Captain is responsible for driving individual warfare officers to reach standards of professional excellence.

The title Operations Officer is euphemistic, because it is not even close to being defined in terms of authority, responsibility and accountability; the task at present stops well short of having a responsibility for the full range of Operations a ship can be called on to perform.





PROPOSED SHIP ORGANISATION

LEGEND

PERSONAL RESPONSIBILITY TO COMMANDING OFFICER

DEPARTMENTAL RESPONSIBILITIES TO HEAD OF DEPARTMENT

A SUMMARY

The preceding discussion has attempted to lead the reader to the point where he agrees that whole ship planning of internal and external requirements can be improved for the benefit of all departments by an amalgamation of responsibilities for internal and external matters. There is also a questioning of the rationale for allocation of individual and whole ship responsibilities to the Executive Officer and other heads of departments, and to suggest that there are viable alternatives for the re-distribution of selected activities. And in particular, whether this loading is conducive for the Executive Officer's principal responsibility of being second-in-command when other heads of departments have the expertise to take on some of his tasks, and maturity to accept him as their coordinative head. There has also been an endeavour to suggest that the prime function of the second-in-command is in fact to be a true deputy, and that this necessarily brings a requirement for greater involvement in warfre and operational matters.

The reader will possibly be familiar with recent changes in the RN and the USN and perhaps consider that the foregoing is no more than an Australian copy. I suggest not, because both those Navies have a different branch structure and the RN in particular is merging the WE maintainers and users in a number of categories — perhaps we should do the same, but that is beyond the scope of this article. In the mean time I will accept the criticism of being influenced in my thinking by developments in both the RN and USN.

THE SOLUTION

Leading now to a proposed solution, Figure 2 represents the summary of an organisation by which it is planned to overcome the preceding shortcomings. The changes are not considered difficult to implement although a number of publications, etcetera would need to be revised to reflect amended terms of reference.

The most significant change is that the Executive Officer gives up some responsibilities while taking on the role of Operations Officer, and becomes responsible to the Command for the operational proficiency of all of the warfare sub departments, as well as the development and implementation of operational activities and exercises. But he is not a watchkeeping PWO. Those PWOs on their second, or subsequent tour at sea may feel some resentments at this apparent slight on their undoubted skills, but their talents should be looked upon as providing the

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opportunity for some delegation by Executive Officers of those ships.

As the Executive Officer, he remains the head of the Seaman Department and accountable for its performance, but uses a Seaman officer to oversee all matters relating to seamanship and upper deck work applicable to the department. This also provides an opportunity for those officers not wishing to become SWO trained to be posted to 'salt horse' billets; and maybe then we will see development in the officer corps of the impetus required to reinstate seamanship as a skill of prime importance.

As second-in-command, the Executive Officer retains responsibility for the coordination of all whole ship activities in that he plans for their incorporation in the ship's programme, and through his control of the ships regulating organisation ensures that manpower is made available. There could be here an opportunity for the Coxswain to take on a greater role as the overall regulator for the ship if he could give up his present responsibilities except for being the ship's policeman; by definition he is the senior sailor in the ship, and is therefore not really part of any department and this could be seen as providing an impartial adjudicator in this important position.

Other Heads of Departments are directly responsible to the Command for the conduct of whole ship activities if they consider they cannot meet these obligations. The WEEO assumes responsibility for all explosives, the MEO for all aspects of NBCD, and the Supply Officer for ship's internal cleanliness (otherwise known as 'hotel services') with officers and sailors of other branches responsible to him as necessary. This does not fracture either the Executive Officer's or other Heads of Departments lines of responsibility and concomitant accountability. Irrespective of near perfect terms of reference, their positions will always require maturity, a willingness to negotiate, and good will.

The advantages of this organisational arrangement are that the overall operational aspects of a warship are handled by the officer most experienced, and that other Heads of Departments are given more responsibility for whole ship activities than at present. Additionally, SWO trained officers in PWO billets are able to devote all of their energies to becoming professionally competent and learning the intricacies of their sub-specialisation while supporting the Executive Officer in their particular fields of expertise.

Those factors not addressed so far are the intangibles. The Executive Officer's terms of reference at the moment are deliberately broad. and that is how it should be for such a position where too many tight management descriptors interfere with common sense. There will always be times when it is necessary for him to take the ship, because the Captain needs to get some sleep sometime. But there has never really been the option of the Captain delegating his absolute responsibilities for his command, and for this fundamental reason the oft discussed but impractical arrangement of the Captain and Executive Officer watchkeeping opposite each other is a non-starter. By virtue of being both second-in-command and a real Operations officer, as well as his retention of responsibilities for discipline, direction of the principal regulating senior sailor, and close

involvement with all of the departments, the Executive Officer will have no opportunity to not know what is going on in the ship and apply his influence. And the quality of future Commanding Officers should reflect the benefits.

The Author

Commander David Shackleton joined the RAN as a midshipman in 1966, qualifying as a PWO in 1975 and as a PWO(D) in 1978 after completing the AWO(A) course. In addition to RN exchange service and a long stint in *HMAS MELBOURNE*, he has had several postings to DDG's. After initially serving in *HMAS PERTH* during her 1968/69 Vietnam operations, he returned as her Executive Officer in 1983. David Shackleton is a graduate of Russell Hill, the RANSC and JSSC, and is presently in command of *HMAS DERWENT*.



The HMAS STIRLING fleet support facility — Australia's fastest growing defence asset. Alongside the submarine wharf are the hydrographic survey ship HMAS MORESBY and the submarine HMAS OXLEY. The escort wharf sees HMAS STUART outboard of HMAS DERWENT with HMAS SWAN tied up astern with the water/oil fuel lighter WYULDA outboard. The patrol boat HMAS GERALDTON is visible on the slipway in the centre of the photo, and the patrol boats HMAS BUNBURY HMAS ADROIT (RANR) along with the naval tugs TAMMAR and QUOKKA plus SDB.1325 are secured in the small craft compound.

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FOREIGN ACCESS TO NATIONAL BASES: AN ESSENTIAL ASPECT OF THE REGIONAL SECURITY OF THE SEA LANES OF COMMUNICATION

by

Rear Admiral Carlito Y Cunanan AFP Flag Officer In Command Philippine Navy

It is a generally-accepted fact that the sea lanes of the Western Pacific are crucial to world trade and communication. There is, therefore, a need to ensure that these sea lanes should continue to be free and available for all members of the international community of nations.

Evolving Geopolitical Configurations in the Region

Developments in the recent years indicate the possible intensification of the sociopolitical tensions in the region. In 1978, a peace treaty between the People's Republic of China (PRC) and Japan was firmed up. During this period, the relationship between China and the United States (US) also became stronger.

In late 1978, a treaty was forged between the Soviet Union (USSR) and Vietnam. Since then, the USSR has provided Vietnam approximately over \$US2 billion in military aid, along with 2500 military advisors; and, over \$US5 billion in economic aid, as well as 3500 economic advisors.¹

This treaty has enabled the USSR to extend its military presence in the region. It is reported that the USSR has a permanent naval presence of 15 ships and auxiliaries, and over 100 aircraft in the area.²

The strengthened ties between Japan and China, and between the US and China, can be viewed as part of a long-term encirclement of the Soviet Union by China and the West. It is, thus, to be expected that the USSR will try to relieve the pressure by expanding its sphere of influence in the region south of China.

By its military presence in Vietnam, the USSR has secured for itself a vantage position whereby it could quite readily have access to the sea lanes of Southeast Asia. With Vietnam as a staging base, the Soviets can respond rapidly either to a crisis in the region; or, to project itself as a naval and air power in Southwest Pacific.

This possibility underscores the need, as an Australian Minister had once said, "to reduce tensions there that promote uncertainty and increased involvement in the region by external powers."³

In addition to these emerging geopolitical configurations, the United States has been advocating for burden sharing in the maintenance of security in the region.

The call by the US for burden sharing is not new. Since its Vietnam experience, and the deterioration of its economy, the US has admitted that it "is no longer able to shoulder the burden of defense alliances to the degree that it has done so in the past."⁴

In the light of these developments, the need to secure the region's sea lanes of communication assumes added significance.

Prospects for Disruption of Sea Lanes

The possibility that the Soviets will indeed try to disrupt the sea lanes of Southeast Asia is a matter of studied speculation. Indeed, there is a school of thought which says that the disruption of the region's sea lanes would be more detrimental to the Soviets.

The extent of the Soviet's merchant and fishing fleets argue that the Soviets, themselves, would end up with the shorter end of the stick when this happens. Soviet trade with Indochina and Southeast Asian countries alone is worth almost US\$3,000 million.

The commercial sea lanes passing through Southeast Asia are vital to Soviet interests in the transfer of goods and materials between Soviet European and Far Eastern ports.⁵ In addition, recent announcements of the USSR policy on *glasnost* inspire hope among many that we are truly moving towards an era of peace.

Given all these, the possibility for an armed conflict over the sea lanes nonetheless still exists. Nations continue to consider war as an effective tool in the prosecution of a foreign policy.

It would be rash to predict that no conflict will happen. The Stockholm-based International Peace Research Institute had noted that, since 1945, a major war had occurred every three and a half years.⁶

The projections of a resource-scarce future coupled with unabated population increase indicate that countries will probably wage wars for minerals, fishing grounds, and energy resources that can be extracted from the sea bed.⁷

Protecting the Sea Lanes: A Regional Concern

This underscores the need to secure the sea lanes of the region. Viewed from the wide expanse of regional security, it is extremely difficult (and costly) for one country to prevent, by itself, the disruption of sea communications. Affected countries have to participate actively and sincerely in a collective effort to regulate the sea lanes.

The individual participation of a country in such an effort will have to depend on its national policies and its capabilities. There may be some who would have the naval force to secure the passage of shipping in the region and prevent attempts to prevent the free flow of sea traffic. In like manner, there might also be some countries which may have the naval capacity to bring military power to bear in distant sea areas.

In both instances, access to friendly shore facilities are essential. This strategic necessity, coupled with the wide expanse of the area to be secured, mandates the need for a collaborative framework for regional security. A framework that can serve as a basis for the relationships among the countries involved.

Regional Security: The Philippine Position

The Philippines, as an independent sovereign state, and as a member of the world community, adopts the principles of international law. It subscribes to the policy of peace, equality, justice, freedom, cooperation and amity with all nations.

This adherence to the principles of international cooperation, including the mainten-

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ance of regional security, is reflected in the covenants that the Philippines have struck with various countries.

The Philippines is a signatory to the Southeast Asian Collective Defense Treaty (Manila Pact). Consistent with its commitments, it has made its modest contributions to efforts aimed at the maintenance of regional peace.

Together with other members of the ASEAN, the Philippines declared in 1987 that it seeks, among others, to promote regional peace through abiding respect for justice and the rule of law and adherence to the UN charter.

In that declaration, it affirmed that all foreign bases are temporary and remain only with the expressed concurrence of the countries concerned and are not intended to subvert the states in the area.

A strong strand of consistency characterizes the Philippine position with regard to the maintenance of regional peace and security.

The 1986 Philippine Constitution provides that, after the 1991 expiration of the agreement between the Philippines and the US concerning military bases, "foreign bases, troops, or facilities shall not be allowed in the Philippines except under a treaty duly concurred in by the Senate and, when Congress so requires, ratified by the majority of the votes cast by the people in a national referendum held for that purpose and recognized as a treaty by the other contracting state."⁸

The Philippine Constitution also provides that "The Philippines, consistent with the national interest, adopts and pursues a policy of freedom from nuclear weapons in its territory."⁹

Quite recently, the Philippine Secretary of Justice has rendered the opinion that the definition of "national interest" is incumbent on the President of the Philippines.

This has been taken to mean that the Constitutional policy on nuclear weapons in Philippine territory does not necessarily imply a total ban.

These Constitutional provisions do not close the door to the forging of regional security arrangements between the Philippines and other countries. What they emphasize is the process by which such agreements are to be made binding on the country and its people.

Meanwhile, the arrangements covered by the Military Bases Agreement of 1947 between the Philippines and the US with regard to US facilities in Philippine bases is currently being reviewed.

Among others, the 1947 Agreement provides that the Philippine and the US, without prior mutual consent, cannot grant any Third Power any rights, power, or authority whatsoever in or relating to military bases.¹⁰

Over time, several amendments have been introduced.

In 1959, it was mutually agreed that the operational use of the bases for military combat operations other than those conducted in accordance with the Manila Pact and the RP-US Mutual Defense Treaty shall be the subject of prior consultation with the Philippine Government".¹¹

In 1979, this agreement was modified to state that the bases are Philippine military bases over which Philippine sovereignty extends; that, each base shall be under the command of a Philippine base commander; and, assured the US of unhampered military operations involving its force in the Philippines.¹² Incidentally, apart from being the Flag Officer in Command of the Philippine Navy, I concurrently serve as the Commander of Subic Naval Base Command.

These internal developments in the Philippines and its evolving agreements with other countries underscore its openness to collaborative arrangements for the region's continued peace.

Foreign Access to Philippine Bases: Prospects

In the context of these developments and agreements, the current practice in providing foreign access to Philippine bases where US facilities are located, is for a Third Country to seek the approval of both the Philippine Government and the US Navy Facility Commander before a third country naval force can enter, say, the Subic Naval Base.

The Philippine experience indicates that most often, entry of third country armed forces is for purposes of port visit, reprovisioning, repairs, conferences, naval exercises, or training. The period of their stay can be a brief single day or a longer one, depending on the nature of their request. Most of those which call on Philippine bases are from allied countries such as Japan, Thailand, Singapore, Indonesia, and Australia.

Expanded Access Possible

It is certainly possible for the Philippine Government to expand foreign access to its bases beyond its current practice and arrangements. What is essential, in the realization of this possibility, is a clear enunciation of the terms of reference within which access is to be granted. The proposed arrangement would have to be consistent with Philippine commitments to the United Nations charter and to other countries.

It will have to be in accord with the provisions of the Philippine Constitution; and, the proposed agreement will not diminish Philippine sovereignty over its territory.

If foreign access to national bases will consist of refueling, reprovisioning, maintenance and repair, emergency health services, and operational coordination and consultation, then, there could be no serious objections to the proposed arrangements.

Certainly, efforts should be exerted to minimize those that will tend to intensify the socio-political tensions in the region, such as arms build-up and the like.

Vital in the realization of a multilateral concept of regional security for the sea lanes of communication is its congruence to Philippine national interests.

Definitely, Philippine national interests will be the main and primary yardstick in the decision to provide foreign access to Philippine bases.

If it is established that such access is deemed beneficial to Philippine national interests, then it is highly probably that the Philippine government will favour moves to make its maritime ports, naval bases, and stations, and its military or commercial airport facilities to friendly nations particularly in the proposed multilateral arrangements.

Alternative Arrangements to be Explored

Today, in the Philippines, there are strong sentiments about the continued stay of US military facilities in Philippine territory. It is highly probable that there will be stiff opposition to any proposal that would parallel the current arrangements between the Philippines and the US. In this regard, alternative, and perhaps, more politically-feasible arrangements would have to be explored.

Consensus on Perceived Threat

Proposals for inter-country collaboration to secure the sea lanes of the region can gain stronger political acceptance when there is a commonality of perceptions, among the participating countries, regarding the perceived threats. There might be some debate as to what would be the threats to the region's security. This, however, does not detract from the need to secure the region's sea lanes of communication. There is a general consensus that this need is real. Addressing needs require resources. If there are costs to regional stability and peace, then, there is a need to meet these costs.

Meeting the Costs of Regional Security

In this regard, the costs involved in addressing this regional need will have to be determined. Agreements among the governments affected in carrying, equitably, the burden of regional security will have to be forged.

The countries in the region have their own respective priorities. They have their own individual national agenda. It is an agenda that will determine what a government is willing to contribute to the costs of regional security. What a country is willing to share will depend on its perception of the benefits that it will reap from such an arrangement. It will also depend on what it thinks it can afford.

It may be anticipated that the costs of regional security cannot be equally shared among the affected countries. But, it should be expected that all should contribute, albeit unevenly.

Interdependence should be the guiding principle in the definition of roles to be adopted by the affected countries. In this manner, the possibility of one country assuming a dominant position over the others could be minimized.

In Summary

The Philippines is aware of the current geopolitical events that can eventually reshape the security configuration in the region.

The Soviets have expanded their influence into the region. The US had repeatedly asked the affected countries to share in the costs of maintaining regional security along with its announced intentions to scale down its military presence in the region.

These twin developments will certainly affect the balance of power that is essential in the continued stability of the region. All these point to the need for alternative arrangements to ensure regional security. These arrangements should stem from a common perception on the threats to the regional sea lanes; and, an agreement on the role of each country to secure these sea lanes.

For some countries, particularly, in Southeast Asia, this role could consist of providing access to national bases for naval and air forces tasked to secure the regional sea lanes of communication. In this regard, the criteria for sharing the costs of regional security will have to be firmed up, and agreed on by the countries involved.

Historically, the Philippines has looked with favour at any collective effort to ensure the safety and free unhampered use of international sea lanes in the Western Pacific. In this context, the Philippines supports the current effort.

Notes and Acknowledgements

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COMMAND, CONTROL, INTELLIGENCE

by

Alan Robertson, Commodore, RAN (Rtd)

Introduction

Assumptions

I believe it is not possible to address this subject without making some assumptions. Accordingly, I assume that all Governments concerned have agreed,

- a. to the establishment of the three suggested Naval Control of Shipping areas, North East Asia, the ASEAN and ANZAC areas.
- b. to the commitment of national resources to the common objective of protecting shipping within defined geographical areas.
- c. to the subordination of some measure of national sovereignty to the needs of this proposed multi-national organisation.
- d. to delegate an adequate measure of political authority to a standing council to determine policy for the organisation, and that,
- NATO or some other established international politico-military organisation would release enough appropriate publications, such as signal books, to the proposed organisation.

Some Problems of Multi-national Command Structures

Human nature being what it is, and national sensitivities being what they are, the establishment of multi-national military command structures which aim to co-ordinate the efforts of independent nations with differing social and political traditions can present a daunting challenge. Even given my assumptions above about political goodwill and endorsed policy guidelines, the opportunities for debilitating misunderstandings still remain. While it is easy to use, say, the well-tried Task Force Organisational framework to establish command relationships and to adopt without amendment the command definitions in, say, the released NATO publications, the allocations of command authority to the representatives of the various member countries is unlikely to be without hazards. Personal, Service and National ambitions are bound to come into it. as any study of multi-national organisations since 1945 will show. Furthermore where units of one nation are placed under the operational

control of an allied commander, it is entirely possible, for example, that the terms of the subordinate's national directive may not be satisfactory to his superior. And that is only one possible problem, there could be many more.

I have no intention to strike too negative a note at the outset, and, happily, in my experience, navies seem to find it easier to work with each other than other Services, but I believe it would be unwise not to expect difficulties in both establishing an effective command and control structure, and then fleshing it out with appointed commanders and units.

Command, Control, Communications and Intelligence

Command and Control

With that as background and using a form of Task Organisation for our framework, let us try to envisage a notional command and control structure for SLOC security in the Asia-Pacific region.

For a number of obvious reasons the United States would almost certainly be asked to provide the Common Superior, the Task Force Commander (CTF). Whether that would be CinCPac, CincPacFlt, or some other deputy for NCS would be a matter for the US to decide, as would be the provision and location of his headquarters.

Under CTF Lenvisage his three principal area commanders; let us call them Task Element Commanders (CTEs).

For the North East Asia area, and for the obvious reason of the relative size of the contribution each would make, it seems likely that Japan would invited to provide the CTE and his headquarters. I assume that Japan and Korea could be able to agree to the delineation of areas of command responsibility, in those narrow waters where their sea areas are adjoining.

Similarly, in the ANZAC area Australia could be expected to provide the CTE and his headquarters, with New Zealand, I hope, volunteering to provide a Task Unit and a subarea command, with the military assets to go with it. About the ASEAN area I am less certain. Furthermore the problem is compounded by a large US component and existing USN command headquarters already established at Subic Bay. So there are many possibilities, and rather than make a choice I would much prefer to hear what the ASEAN members themselves think would be the best solution, but I will put up a proposal as a basis for discussion, and listen to your views.

For geographical reasons I would suggest that the Philippines should provide the CTE and his headquarters. While some of the US forces based at Subic might be assigned to the ASEAN area CTE, I believe the bulk of them should remain under US national control as a reserve to be used by the CTF to reinforce especially threatened points, or to conduct strikes against enemy bases, and so on.

Even after that there are still tricky problems to be resolved, sorting out command boundaries and responsibilities in such important waterways as the Malacca Strait, Singapore Strait, and the South China Sea. Maintaining realistic command areas and keeping individual national requirements satisfied could present problems. Clearly Indonesia is best placed to control the Straits and seas in its own archipelagic waters, and given that huge task, might be willing to have Malaysia accept responsibility for the Malacca Strait, and Singapore, the Singapore Strait.

Headquarters and Staffing

Once the problems of the command areas and commanders had been resolved, the need for appropriately equipped and sited headquarters has to be satisfied. The actual scale of facilities needed in each could be determined by the CTF and his subordinate commanders, adapting existing national facilities to meet agreed standards. As well the desirability of providing liaison officers, or alternatively, some measure of multi-national staffing would need to be considered. On the whole it would seem to me less costly and just as effective to provide liaison officers to adjacent area commands, to help smooth the path of international co-operation.

Operational Units

Operational units, ships and aircraft, would be assigned within the Task organisation by the CTF. Generally, it would seem to be most practical to try to keep, say, an escort force commander and his screening ships from one navy as much as possible. The problems of different languages, and the common understanding gained through national training systems suggest to me that any more ambitious ideas of mixing force elements in multi-national groupings for idealistic reasons, should be resisted, except for training exercises. This is especially important because of the need for effective communications.

Communications

Although not specifically part of my brief, the glue which would hold this proposed organisation together is communications. And I speak as a former communicator, with some experience of multi-national organisations, both NATO and SEATO.

Given the ready availability of commercial international communications channels, it would not be too difficult to establish a fixed network to link all the land-based commanders with one author. And there should be no difficulty in providing a suitable high grade cryptographic system, since there are now so many readily available from commercial sources.

A major problem to address would be whether to use narrative messages and handplotted data in the various headquarters, or to establish a much more sophisticated computer-based data transfer system. Because of the large volumes of data NCS systems generate, the very large organisation envisaged, and the need for speed and accuracy, these reasons suggest to me that automated data systems would be essential. But, of course, we should be wary of scaring off politicians if it looked like costing too much, initially. We might have to sneak up on them later. But the transfer of NCS data by automated systems could minimise language problems and generally ensure a much more efficient system.

As far as seagoing units and land-based maritime aircraft are concerned, communications is another strong argument for trying to keep units of one navy together. Furthermore, some may have automated tactical data systems, not necessarily fitted in other nations' units. Problems of communications compatability can be severe.

Even when nations ostensibly speak the same language there can be differences of understanding of even the most simple matters, or the different interpretations placed on the meanings of signalling procedures, for example. So, while my inclination is to see multi-national groupings, I believe it would be unrealistic, at least in the initial stages. But it would be necessary to make these reasons known to everybody, to avoid the dangers of excessively rigid nationalistic attitudes being developed to the detriment of morale.

Intelligence

It only requires the briefest acquaintance with some of the books describing the conduct of shipping protection operations in World War II to realise that the availability and management of operational intelligence would be vital to the organisation's success. Each member nation will have its own sources now, some more sophisticated than others. Only the United States, for instance, will have a comprehensive ocean surveillance system using satellites. But sometimes even very simple sources of intelligence can be very effective. For example, Australia's Director of Naval Intelligence set up a simple coastwatching service in the 1930's, and it produced priceless intelligence on ships, aircraft, and sometimes even submarines. Around harbours spotters can be trained to watch for aircraftlaid mines, enemy intelligence gatherers and possible special force raiding parties. Between these two levels, satellites and spotters, the success of the British Admiralty's submarine

tracking room in World War II, co-ordinating intelligence from a number of sources lead to insights into the operational deployment patterns of German U-Boats.

My point is that each member nation can make a significant intelligence contribution, whatever its sources. How much each would choose to contribute would be a national decision; how much they would feel obliged to withhold information to avoid compromising sources is another matter. But it is a fact that the better the operational intelligence the organisation could provide, the easier it would be for our colleagues at sea who had the lonely, dangerous and often plain boring task of being the last line of defence for the shipping on which we all depend.

Conclusion

This, of necessity, has been a fairly sketchy coverage of a vast subject. I have done no more than raise a number of issues which I hope we can pursue in more detail in our discussion. What I have said is merely to spark discussion, and is of far less importance than the comments you will make on those issues, or even the issues you think I should have raised but have not done so.

DEMISE OF THE HANDWRITTEN FORMAL LETTER

A little history found deep in the files of the Directorate of Fleet Engineering Policy. Written in 1984 on the demise of the handwritten formal letter; a victim of simplified typing.

Sir,

I have the honour to state I am aware of the current debate be pleased to learn that I view with concern the formal, penned letter's planned fate.

May I ask your attention be drawn, and the searchlight of memory shone on the Navy's rhymed laws which may give you pause in this age with most elegance zone.

The effort of writing by hand at a senior's displeasured demand is a judgement that's nice a most useful device for an unlogged and light reprimand.

For the hot-blooded, ill-treated youth it provides an escape for his truth. 'Tween beginning and end he may harmlessly rend his superiors, provided he's couth.

I urge you most strongly to see that the formal, penned letter to me permits punishments light or a most civil fight —

your servant, I have the honour to be.

A wide distribution may be the solution to ensure nothing lags. I propose — to all flags?

James M. Sandison Lieutenant Commander, RANEM

The rhymed law refers to "The Laws of the Navy" by R.A. Hopgood and the verse alluded to is:

"Dost think, in a moment of anger 'tis well with they seniors to fight? They prosper, who burn in the morning, the letters they wrote overnight; for some there be, shelved and forgotten, with nothing to thank for their fate, save that (on a half-sheet of foolscap), which a fool "had the honour to state —".

As in practice formal letters were submitted in longhand the justification to disband them due to some simplified typing rationale was considered by some to lack logic and no benefit to the Navy was seen in disgarding a tradition which had served a purpose.

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