AUSTRALIA AND ITS MARITIME INTERESTS: AT HOME AND IN THE REGION



Edited by Andrew Forbes

SEA POWER CENTRE - AUSTRALIA

Australia faces a complex security environment that is predominantly maritime in nature:

- the rise of China and India
- tensions and potential conflict between our major trading partners in Northeast Asia
- congested sea lanes and unresolved maritime boundaries in Southeast Asia
- the growing importance of the Indian Ocean
- extensive Australian interests in the Southern Ocean and Antarctica

In order to meet these challenges, cooperation is essential:

- evolving international law, safety and security regulations, and other cooperative arrangements
- the new United States maritime strategy
- regional naval cooperation
- coalition naval operations in the Arabian Gulf

Specific actions by the Royal Australian Navy include:

- future roles, missions and structure
- the naval contribution to Border Protection Command
- survey and charting by the Australian Hydrographic Service

Australia and its Maritime Interests: At Home and in the Region

Proceedings of the Royal Australian Navy Sea Power Conference 2008

> Edited by Andrew Forbes

Sea Power Centre - Australia

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Foreword

As maritime professionals we all know that Australia is an island continent dependant upon the sea for our security. We also know that Australia's economic life is bound up with the sea with over 99 per cent of our trade by volume moving through our ports. Moreover, our nation has significant interests in the ocean for food, energy, coastal transportation, recreation and tourism. Yet, for many Australians perceptions of the maritime world do not extend much beyond the beach. For many years almost all our overseas travel has been by air and there is very little general appreciation of maritime issues or just how important the oceans are to our survival and prosperity.

Australia is located at the juncture of the Indian, Southern and Pacific oceans. We are proximate to some of the world's most strategic chokepoints. The Malacca Strait alone sees the passage of 80 per cent of China's imported oil. Given our globalised and open economy, Australia maintains a vital interest not only in its own imports and exports, but also in the uninterrupted flow of this *global* trade. Any interruption of the oil flow from the Middle East to North Asia, for example, would have a quick and detrimental impact on our own economic health.

Australia's maritime responsibilities are extensive and our security interests are diverse. We are accountable for the management, conservation, and protection of the third largest exclusive economic zone in the world; an area far greater than our land mass. With less than 0.3 per cent of the world's population we have some form of jurisdiction over 15 per cent of the earth's surface, ranging in climate from the tropical to the polar. Enforcing the attendant rights and responsibilities over this huge expanse of the globe will invariably involve naval forces.

Of direct relevance to Australia, our friends and allies in Southeast Asia are also all predominantly maritime states, while our major trading partners in North and East Asia are either maritime or have an increasingly maritime focus. Many regional states thus face a range of similar maritime issues and security concerns. While accepting that these aspects have the potential to be sources of inter-state tensions, we must never lose sight of opportunities for maritime cooperation.

With these thoughts providing context, the Royal Australian Navy's (RAN) Sea Power Conference 2008, *Australia and its Maritime Interests: At Home and in the Region*, was held in Sydney between 29 and 31 January 2008. Held in conjunction with the Pacific 2008 Maritime Exposition and the International Maritime Conference, the Sea Power Conference sought to explore issues relating to maritime Asia's unique geography, the types of activities in which navies are involved and the opportunities for maritime and naval cooperation. The papers presented during the conference covered a broad range of issues and were written by serving and retired naval officers from around the world and a wide range of academics. The

papers are reproduced here in five sections corresponding, where appropriate, to their geographical focus.

The first section provides a context for the succeeding conference sessions by examining the strategic situation facing Australia over the next 25 years and the associated impact on the RAN's roles, missions and force structure. The international aspect is not neglected, with some discussion on the recently released US maritime strategy *A Cooperative Strategy for 21st Century Seapower*, which no doubt will be a driver for future maritime cooperation in the Indo-Pacific region.

The next section looks at North Asia, where the complex political interplay between China, Japan, and South Korea is examined - a dynamic informed by historical legacies and current strategic tensions, and overlaid by the continued US regional presence. The economic rise of China is well known, and its focus on commercial maritime activities and naval modernisation provoked considerable discussion during the conference. Not presented at the conference but included here is a paper on the evolution of the Japan Maritime Self-Defense Force and Japanese strategic maritime thinking. This section is rounded out with a discussion of three multilateral agreements on maritime safety and security that could form the basic framework for enhanced maritime cooperation in the region.

The third section examines issues in Southeast Asia, with an interesting paper from the Republic of Singapore Navy on how navies in the region are cooperating either bilaterally or multilaterally to manage safety and security concerns. An examination of piracy in the Malacca Strait, based on field work among local fishermen who have been subjected to such attacks, provides a unique insight into the business of piracy and emphasises that piracy is best regarded as a law enforcement issue and resolved ashore. Rare for an Australian publication, the final paper in this section examines the relationship between the Philippines and Australia, analysing how the recently signed *Status of Visiting Forces Agreement* has assisted the military cooperation between the two countries in counter-terrorist activities.

Although it constitutes Australia's western flank, the Indian Ocean often receives less attention than it deserves in debates concerning Australia's strategic interests. Consequently the fourth section of these proceedings comprises papers by senior officers from both the Indian and Pakistani navies, outlining their views on the region, their maritime interests and their respective bilateral and multilateral naval cooperative activities.

The final section of the book examines Australian issues, including national interests, aspects of national security and specific RAN activities. Sometimes taken for granted is our relationship with New Zealand, particularly regarding mutual concerns that face us in the areas of maritime security and fisheries issues in the Southern Ocean. The first paper examines legal frameworks for managing these issues, while the second focuses directly on Australian interests in the Southern Ocean and Antarctica, including an interesting history of Australian Defence Force support to our scientific endeavours in Antarctica. Inter-agency cooperation is often

critical to manage offshore safety and security problems, and the creation of the Joint Offshore Protection Command in 2005, (redesignated as the Border Protection Command in 2006) is an example of how Australia now manages offshore non-state based threats in the maritime domain.

Navies are constantly evolving to better face increasingly complex threats, and the final two papers presented here examine specific issues concerning the RAN. The first provides a comprehensive description of the importance of the Australian Hydrographic Service and its contribution, not only to Australia's responsibilities under the International Convention for the Safety of Life at Sea 1974 for safe navigation in Australian waters, but also to military operations through hydrographic survey and charting. The second paper outlines critical planning issues associated with the replacement capability for the Collins class submarine, and will help inform departmental thinking on the subject.

The overall theme emanating from the conference papers is the continued need for regional cooperation on a wide range of issues to manage the safety and security concerns facing maritime Asia. We must continue to strive to build confidence, capacity, understanding and transparency between nations. I hope that the 2008 RAN Sea Power Conference and these proceedings help to do just that.

I trust you enjoy the range of papers presented.

PI LEAVY Captain, RAN Director, Sea Power Centre - Australia May 2008

Notes on Contributors

PROFESSOR ROMMEL BANLAOI

Rommel C Banlaoi is the Executive Director of the Philippine Institute for Political Violence and Terrorism Research while serving as a professorial lecturer at the Command and General Staff College of the Armed Forces of the Philippines. He was a Professor of Political Science and International Relations at the National Defence College of the Philippines where he served as Vice President for Administrative Affairs and Assistant Vice President for Research and Special Studies. He has provided consulting work for the Department of National Defence. He also sits as a member of the Board of Trustees of the Strategic and Integrative Studies Center.

VICE ADMIRAL PAUL BOISSIER, CB

Paul Boissier joined the Royal Navy in 1974. Volunteering for service in submarines, he served as the Navigating Officer of HMS *Sceptre*, the First Lieutenant in HMS *Oberon* and took command of HMS *Onyx* in 1985. After a short time as an instructor at Britannia Royal Naval College in 1987, he was promoted commander and took command of submarine HMS *Trafalgar*. His final sea appointment was as the Commanding Officer of the frigate HMS *Chatham*.

His staff appointments within the Ministry of Defence have included posts within the Directorate of Naval Plans for Underwater Warfare, the Directorate of Naval Staff Duties and the Strategic Defence Review Team in 1997. He was appointed Director Navy Plans and Programs upon promotion to commodore in 1998. In 1999 he attended the London Business School for the Sloan Fellowship Masters Program, for which he earned his Master of Science degree.

His most recent appointments have included the Portsmouth Naval Base Commander, the Deputy Commander of NATO Naval Striking and Support Forces Southern Europe, based in Naples, and the Director General Logistics (Fleet) as a Navy Board Member. He is currently the Deputy Commander-in-Chief Fleet.

REAR ADMIRAL PETER BRIGGS, AO, CSC, RAN (RTD)

Peter Briggs commenced training at the Royal Australian Naval College in 1961, graduating in 1964. As a submarine specialist he served in a range of sea and shore postings including Command of HMA Submarines *Otway* and *Oxley*, the Director, Submarine Warfare Systems Centre, command of the Royal Australian Navy Submarine Squadron and HMAS *Platypus*, and Director of Submarine Warfare at Navy Office, Canberra.

After promotion to commodore in December 1989 he served as the Naval Officer Commanding Western Australia and Commanding Officer HMAS *Stirling* in 1991-92,

prior to taking up the posting as Commodore Training, heading the embryonic Naval Training Command.

He was promoted to rear admiral on 1 November 1993 and became the Flag Officer Naval Training Command and served as the Head Strategic Command Division in Defence Headquarters, as the strategic level operational planner, he was involved in handling the many contingency/crisis which involved the Australian Defence Force during 1997-99.

Rear Admiral Briggs was appointed as the Head Submarine Capability Team, tasked with implementing a recovery program for the troubled *Collins* class submarine project in mid 1999. He retired from the Royal Australian Navy in January 2001 having achieved the delivery of two modified submarines, and development of a rectification program for the six submarines.

He is currently the President of the Submarine Institute of Australia and Chairman of the *AE 2* Commemorative Foundation.

REAR ADMIRAL CHEW MEN LEONG

Chew Men Leong is the Chief of the Singaporean Navy. He joined the Singapore Armed Forces in December 1985, and in the course of his career, he has held, amongst others, the appointments of Head Naval Operations Department; Fleet Commander; Head Joint Plans and Transformation Department; Commander, 1st Flotilla; Commanding Officer 188 Squadron and Commanding Officer RSS *Vigour*.

A graduate of the Singapore Command and Staff Course in 1996, Chew was the top navy student of his class. During his tenure as Fleet Commander, Chew played a pivotal role in restructuring the Fleet to enhance its operational readiness and its capacity to respond to peacetime contingencies. He also successfully led the Fleet in many bilateral and multi-lateral exercises with foreign navies.

Rear Admiral Chew holds a Bachelor of Engineering degree from the Imperial College of Science, Technology and Medicine, United Kingdom; as well as a Master of Science (Management) degree from the Leland Stanford Junior University, United States.

DR PETER DOMBROWSKI

Peter Dombrowski is a professor of strategy at the Naval War College where he serves as the chair of the Strategic Research Department. Previous positions include director of the Naval War College Press, editor of the Naval War College Review, co-editor of International Studies Quarterly, Associate Professor of Political Science at Iowa State University and defence analyst at ANSER, Inc. He has also been affiliated with other research institutions including the East-West Center, The Brookings Institution, the Friedrich Ebert Foundation, and the Watson Institute for International Studies at Brown University among others. Dr Dombrowski is the author of over 35 articles, monographs, book chapters and government reports. He recently completed a book co-authored with Eugene Gholz, Buying Military Transformation: Technological

Innovation and the Defense Industry (Columbia University Press, 2006), In 2005 he edited two volumes, Guns and Butter: the Political Economy of the New International Security Environment (Lynne Reinner, 2005), and Naval Power in the Twenty-first Century: a Naval War College Review Reader (Naval War College Press, 2005). He received his BA degree from Williams College and an MA degree and PhD from the University of Maryland. Awards include a Chancellor's Scholarship for Prospective Leaders from the Alexander von Humboldt Foundation in 1994.

THE HON IOEL FITZGIBBON MP

Joel Fitzgibbon was sworn in as the Australian Minister for Defence on 3 December 2007.

After leaving school Joel completed an apprenticeship as an automotive electrician and subsequently spent ten years running his own small business. He also served eight years as a Councillor on Cessnock City Council, including a term as Deputy Mayor.

Ioel was first elected to the Federal Parliament in March 1996 as the member for Hunter. Since 1998, he has served on the Labor front bench in a number of portfolios including Small Business, Tourism, Banking and Financial Services, Forestry, Mining and Energy, and Assistant Treasurer.

In 2004, he completed a Graduate Certificate in Business Administration at the University of Newcastle. Earlier as a mature age student, Joel had completed a number of subjects towards an Arts/Law degree at the University of New England.

MR ANDREW FORBES

Andrew Forbes is the Deputy Director (Research) in the Sea Power Centre -Australia, where he is responsible for the research and publication programs. He is a Visiting Senior Fellow at the Australian National Centre for Ocean Resources and Security at the University of Wollongong, and a Research Fellow at the Centre for Foreign Policy Studies, Dalhousie University, Halifax, Canada.

REAR ADMIRAL JAMES GOLDRICK, AM, CSC, RAN

James Goldrick is Commander Border Protection Command. He joined the Royal Australian Navy in 1974 and is a Principal Warfare Officer and anti-submarine warfare specialist. He has served in a variety of Royal Navy and Royal Australian Navy ships, commanded HMA Ships Cessnock and Sydney (twice), and was the inaugural Commander Australian Surface Task Group, where in 2002 he commanded the Australian task group in the Arabian Gulf, and the multinational naval forces enforcing United Nations sanctions. Ashore he has been the Chief Staff Officer to the Chief of Navy, Director of the Sea Power Centre - Australia and Commandant of the Australian Defence Force Academy. A naval historian and prolific author, he was awarded the degree of Doctor of Letters honoris causa by the University of New South Wales in 2006.

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Marcus Haward is an Associate Professor in the School of Government at the University of Tasmania, and is Program Leader, Policy Program, Antarctic Climate and Ecosystems Cooperative Research Centre (ACE CRC) University of Tasmania, Hobart.

His research interests include coastal and oceans governance, Antarctica and fisheries management, and he has published widely in these areas. Marcus has been a consultant and advisor to a number of Commonwealth and state agencies, and been a member of Australian delegations to the APEC Fisheries Working Group, the Commission on Conservation of Antarctic Marine Living Resources and the Antarctic Treaty Consultative Meeting.

DR TIM HUXLEY

Tim Huxley is Executive Director of the International Institute for Strategic Studies – Asia (IISS-Asia) in Singapore. He has worked for many years in the overlap between strategic studies and Asia-Pacific area studies. His PhD is from The Australian National University and he has held posts in the Parliamentary Research Service in Canberra, the University of Wales Aberystwyth, Lancaster University, the Institute of Southeast Asian Studies (Singapore), the University of New South Wales, and the University of Hull where he was Reader in Southeast Asian Politics and Director of the Centre for Southeast Asian Studies. He joined the IISS in January 2003 as Senior Fellow for Asia-Pacific Security and Editor Adelphi Papers, and assumed his present post in April 2007. He is the author of *Defending the Lion City: The Armed Forces of Singapore* (Allen & Unwin), 2000; IISS Adelphi Papers entitled 'Arming East Asia and Disintegrating Indonesia?'; and numerous monographs, edited volumes, articles and research papers, mainly on Southeast Asian politics, international relations and security issues

DR NATALIE KLEIN

Natalie Klein is a Senior Lecturer in the Division of Law at Macquarie University, Sydney. Her research and teaching focus on public international law, including law of the sea and international dispute settlement, and she has recently published on aspects of Australia's maritime security under international law. Dr Klein previously served as counsel to the Government of Eritrea in its maritime boundary dispute with Yemen.

PROFESSOR ROBYN LIM

Robyn Lim is Professor of International Relations at Nanzan University, Nagoya, Japan. Previous affiliations include Australian Studies Professor at the University of Tokyo, Academic in Residence in the Department of Foreign Affairs, and Acting Head of Current Intelligence at the Office of National Assessments. The author of *The Geopolitics of East Asia* (Curzon Routledge, 2003), she is a frequent contributor to the international media on regional security issues. Professor Lim is a Visiting Fellow at the Centre for Independent Studies in Sydney, a Research Associate of

the Institute of Southeast Asian Studies in Singapore, and a longstanding member of the International Institute for Strategic Studies. From 1 April 2008, she will be Adjunct Professor in International Politics and Political Science at the University of Oueensland in Brisbane.

LIEUTENANT ERIC LOBSINGER, USCG

Eric J Lobsinger is a Judge Advocate for the United States Coast Guard and is currently serving at Coast Guard Headquarters in Washington, DC. His LLD from Faculty of Law, Kyushu University, Japan was on the legal relationship between counter-terrorism measures that secure maritime trade and efforts to combat terrorist funding.

MR IOON NUM MAK

Joon Num Mak is an independent analyst specialising in maritime security issues in Southeast Asia. His research goes beyond conventional security frameworks to cover non-traditional security issues, focusing in particular on how the interplay between external and domestic political and economic variables affects the security of both states and societies, including local and marginalised communities.

MS JOANNA MOSSOP

Joanna Mossop is a Senior Lecturer at the Victoria University of Wellington Law Faculty in New Zealand. Her research interests are in the law of the sea, international environmental law and Antarctica. She is a member of the New Zealand Council for Security Cooperation in the Asia Pacific. Her current projects include maritime security in Australasia and the Pacific and compliance with international fisheries law.

COMMODORE ROD NAIRN, RAN

Rod Nairn was appointed Hydrographer of Australia and Commander Hydrographic Meteorological and Oceanographic Force Element Group in December 2004. A career naval officer, he joined the Royal Australian Navy in 1975. His seagoing experience spans 25 years and encompasses hydrographic surveying experience around Australia, New Zealand, the Southwest Pacific, the English Channel and the Norwegian Sea.

Highlights of his career include four sea commands, the operational introduction of the worlds first Laser Airborne Depth Sounder, commissioning of HMA Ships *Melville* and *Leeuwin* and the successful introduction of multi-crewing to the Royal Australian Navy. He first served ashore as quality control officer at the Australian Hydrographic Office in 1984, later returning for terms as Manager, Hydrographic Development, Head of Survey Operations, and Director of Hydrographic Operations and Charting. He is a graduate of the College of Defence Strategic Studies.

Commodore Nairn is currently Chairman of the Australasian Hydrographic Surveyors Certification Panel, the Permanent Committee on Tides and Mean Sea Level, the Association of Australian Ports and Marine Authorities Port Surveyors Working Group and Vice Chair of the International Hydrographic Organization Hydrographic Committee on Antarctica.

MR ALESSIO PATALANO

Alessio Patalano is Laughton Naval History Scholar and PhD candidate at the Department of War Studies, King's College, University of London, where he is completing a thesis on the influence of Imperial naval traditions on Japan's contemporary naval policy, doctrine and strategy. From 2006 to 2008, Alessio has taught modules on East Asian security, Japanese post-1945 defence policy and military history at the Department of War Studies and since 2006, he is visiting lecturer on naval strategy at the Italian Naval War College (ISMM), Venice. From 2004 to 2005, he was research associate at the National Graduate Institute for Policy Studies, Tokyo. Previously, he was research assistant at the Italian Ministry of Foreign Affairs, Asian Affairs Office, Rome (2002). His recent publications include, 'Shielding the Hot Gates: Submarine warfare and Japanese Defence Strategy in the Cold War and Beyond, 1976-2006', forthcoming in *The Journal of Strategic Studies*.

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VICE ADMIRAL RUSS SHALDERS, AO, CSC, RAN

Russ Shalders joined the Royal Australian Navy College in 1967. He commanded the Papua New Guinean patrol boat PNGS *Samarai*, and HMA Ships *Sydney* and *Darwin*, the latter during the 1990-91 Gulf War. He has also held several senior joint staff and single Service positions. On promotion to rear admiral, he became the inaugural Director-General Coastwatch. He is also a graduate of the United States Naval War College and the Royal College of Defence Studies. He became the Vice Chief of the Defence Force in 2002 and was appointed Chief of Navy in 2005.

MR GREG SHERIDAN

Greg Sheridan is the foreign editor of *The Australian* newspaper. After freelancing, he began his full-time journalistic career at the *Bulletin* magazine in the late 1970s. He joined *The Australian* in 1984 and in 1985 was appointed its first ever Beijing correspondent. In 1986 and 1987 he was the paper's Washington correspondent. After a stint in the Canberra press gallery writing about foreign affairs he became *The Australian*'s foreign editor in 1992.

He has twice been a Visiting Fellow at the Centre for Strategic and International Studies in Washington, DC, and is a contributing editor to the United States foreign policy journal, *The National Interest*. He is a Visiting Fellow at the Land Warfare

Studies Centre in Canberra. He is a member of the board of the Australia Indonesia Institute, and in 2001 was awarded a Centenary of Federation medal for his services to journalism. He is a founding member of the Australian American Leadership Dialogue.

Greg has produced five books: *The Partnership, the inside story of the US-Australian alliance under Bush and Howard,* University of NSW Press, 2006; *Cities of the Hot Zone, a southeast Asian adventure,* Allen & Unwin, 2003; *Asian Values Western Dreams, understanding the new Asia,* Allen & Unwin, 1999; *Tigers, leaders of the new Asia Pacific,* Allen & Unwin, 1997; and *Living With Dragons, Australia confronts its Asian destiny,* Allen & Unwin, 1995.

DR IAN STOREY

Ian Storey has been a Fellow at the Institute of Southeast Asian Studies (ISEAS), Singapore, since 2007. He specialises in Asian security issues with a particular reference to Southeast Asia. His research interests include Southeast Asia's relations with China and the United States, maritime security in the Asia-Pacific region, the insurgency in southern Thailand, and China's foreign and defence policies. At ISEAS he is the editor of *Contemporary Southeast Asia*. Ian has published articles in *Parameters, Naval War College Review, Harvard Asia Quarterly, Contemporary Southeast Asia, Jane's Intelligence Review, Terrorism Focus, China Brief* and *Terrorism Monitor*. Prior to his appointment to ISEAS he held positions at the Defense Department's Asia-Pacific Center for Security Studies in Honolulu, Hawaii, 2004-07 and at Deakin University, Melbourne, Australia, 2001-04. Dr Storey received his undergraduate degree from the University of Hull, England, his master's degree from the International University of Japan and his doctorate from the City University of Hong Kong, China.

VICE ADMIRAL ANUP SINGH, AVSM, NM, IN

Anup Singh was commissioned in the Indian Navy on 1 July 1973. A specialist in navigation and direction, he has held a mix of operational, staff and instructional appointments, prior to taking over as Deputy Chief of Naval Staff.

He has commanded four ships of different class and capability: he was the commissioning Commanding Officer of IN Ships *Veere* and *Delhi*. His last operational appointment was Flag Officer Commanding Western Fleet where he led Operation SUKOON, the evacuation of civilians from war-torn Lebanon in July 2006.

Ashore, he has held command and staff appointments including Assistant Controller of Carrier Projects and Warship Production and Acquisition at Naval Headquarters; Chief Instructor (Navy), Defence Services Staff College, Wellington; Chief of Staff, Western Naval Command; and Assistant Chief of Naval Staff (Air).

ADMIRAL MUHAMMAD AFZAL TAHIER NI (M)

Muhammad Afzal Tahir joined the Pakistan Navy on 11 May 1967 and attended the Pakistan Military and Naval Academies at Abbottabad and Karachi respectively prior to commissioning in December 1970. He served on surface ships and mine sweepers before opting to join naval aviation in March 1974. He was Flag Lieutenant to Chief of the Naval Staff from 1981-82. On return from deputation to Qatar in 1985 he was appointed Staff Officer (Operations) to the Commander Naval Aviation.

In July 1985 he was promoted to the rank of commander and was appointed as Executive Officer of a destroyer. In 1988 he attended Joint Services Staff Course at Joint Services Staff College, Chaklala and upon completion of the course he was appointed to its Directing Staff.

In 1990 he returned to Naval Aviation Base as Commander Air. As a captain in July 1992 he commanded a guided missile destroyer and was then nominated to attend Armed Forces War Course at National Defence College, Islamabad. After graduation he was appointed as Commander Naval Aviation and then as Chief Staff Officer to the Commander Pakistan Fleet in 1997. In 1998 he served as Director at Inter Services Intelligence, Islamabad.

In 2000 he was promoted to rear admiral and assigned duties of Deputy Chief of Naval Staff (Operations) and in 2002 moved as Deputy Chief of Naval Staff (Projects).

He assumed the duties of Commander Pakistan Fleet in 2002. In 2004, he was transferred to Naval Headquarters as Deputy Chief of Naval Staff (Training and Personnel) and promoted vice admiral. He held this post until his promotion to the rank of admiral and appointment as Chief of the Naval Staff on 7 October 2005.

PROFESSOR GEOFFREY TILL

Geoffrey Till is the Professor of Maritime Studies at King's College, University of London, and Director of the Corbett Centre for Maritime Policy Studies at the United Kingdom Defence Academy.

In addition to many articles and chapters on various aspects of maritime strategy and policy defence, he is the author of a number of books. His most recent are a major study *Seapower: A Guide for the 21st Century* (Frank Cass, 2004) and *The Development of British Naval Thinking* (Routledge, 2006). He has completed a major study of the impact of globalisation on naval development especially in the Asia-Pacific region, which will appear as an Adelphi Paper for the International Institute for Strategic Studies, London. His works have been translated into nine languages, and he regularly speaks at staff colleges and academic conferences around the world.

ADMIRAL ROBERT F WILLARD, USN

Robert F Willard, a 1973 graduate of the United States Naval Academy, was designated as a naval aviator in 1974 and served in a number of positions in a variety of Squardons including embarkation on US Ships *Constellation, Ranger, Kitty Hawk* and *Carl Vinson*. While embarked in *Carl Vinson*, his 'Screaming Eagles' twice supported Operation EARNEST WILL in the North Arabian Gulf. In 1990 he was

selected to attend Nuclear Power School; following graduation in 1992, he rejoined the crew of *Carl Vinson* as Executive Officer.

Willard commanded USS *Tripoli* in 1994-95 and supported operations in Mogadishu, Somalia, and later responded to the renewed Iraqi threat to Kuwait, and command ed USS *Abraham Lincoln* in 1995-97 in the Arabian Gulf while the flagship was supporting Operation SOUTHERN WATCH. Selected for promotion to flag rank in 1997, he next served on the Joint Staff as Deputy Director for Operations (Current Readiness and Capabilities).

Willard served as Commander, Carrier Group Five embarked on board *Kitty Hawk* in Yokosuka, Japan in September 2000 and then reported as Deputy and Chief of Staff, Commander in Chief, United States Pacific Fleet, in October 2001. On 18 July 2002, he assumed command of the Seventh Fleet.

DR ANDREW WINNER

Andrew C Winner is an Associate Professor of Strategic Studies in the Strategic Research Department at the Naval War College, Newport, Rhode Island. His areas of focus are South Asia, non-proliferation, maritime strategy, the Middle East, and United States national security. In June 2007, he was awarded the Navy Meritorious Civilian Service Award for his work on the Navy's new maritime strategy. Prior to his current appointment, he was a senior staff member at the Institute for Foreign Policy Analysis in Cambridge, Massachusetts. Prior to joining the Institute, he was executive assistant to the Assistant Secretary of State for Political-Military Affairs and special assistant to the Under Secretary of State for Arms Control and International Security Affairs, where he worked on non-proliferation, security in the Persian Gulf, arms transfer policy, bilateral security dialogues, NATO enlargement, and security assistance. He began his government career as a Presidential Management Intern at the Department of State. He holds a PhD from the University of Maryland, College Park, an MA degree from the Johns Hopkins University School of Advanced International Studies, and an AB degree from Hamilton College.

Abbreviations

AAD Australian Antarctic Division
AAP Australian Antarctic Program
AAT Australian Antarctic Territory

AAW Anti-air Warfare

ACE CRC Antarctic Climate and Ecosystems Cooperative Research Centre

ADF Australian Defence Force

AFMA Australian Fisheries Management Authority

AFP Armed Forces of the Philippines
AHS Australian Hydrographic Service
AIP Air Independent Propulsion
AIS Automatic Information Systems

ALP Australian Labor Party

AMIS Australian Maritime Identification System
AMIS Australian Maritime Information System
AMSA Australian Maritime Safety Authority

ANARE Australian National Antarctic Research Expedition's

ARF ASEAN Regional Forum
ARG Amphibious Ready Group

ASEAN Association of Southeast Asian Nations

ASG Abu Sayyaf Group

ASW Anti-submarine Warfare

ATCM Antarctic Treaty Consultative Meetings
ATCP Antarctic Treaty Consultative Partie

ATS Antarctic Treaty System

AWD Air Warfare Destroyer

BJP Bhartiya Janata Party

BMD Ballistic Missile Defence

BPC Border Protection Command

C3I Command, Control, Communications and Intelligence

C4I Command, Control, Communications, Computers and Intelligence
C4ISR Command, Control, Communications, Computers, Intelligence,

Surveillance and Reconnaissance

CAML Census of Antarctic Marine Life

CARAT Cooperation Afloat Readiness and Training

CCAMLR Convention for the Conservation of Antarctic Marine Living Resources

CCAS Convention for the Conservation of Antarctic Seals

CEP Committee for Environment Protection

CJTF 639 Commander Joint Task Force 639
CMCP Coalition Maritime Campaign Plan

CMS Chief of (Maritime) Staff

COMNAP Council of Managers of National Antarctic Programs

CPI Communist Party of India

CPUE Catch Per Unit Effort

CSCL China Shipping Container Lines

CSIC China Shipbuilding Industry Corporation

CSIRO Commonwealth Scientific and Industrial Research Organisation

CSO Company Security Officer
CSR Continuous Synopsis Record

CSSC China State Shipbuilding Corporation

CSW Coastwatch South Project

CZ Contiguous Zone

DCP Defence Cooperation Program

DD

DDG

DDH

DPP Democratic Progressive Party

DR Disaster Relief

DSTO Defence Science and Technology Organisation

DWT deadweight tons

ECDIS Electronic Chart Display and Information Systems

ECS Extended Continental Shelf
EEZ Exclusive Economic Zone
ENC Electronic Navigational Chart

EPBC Act Environment Protection and Biodiversity Conservation Act 1999

FBIS Foreign Broadcasting Information Service

FPDA Five Power Defence Arrangements
G8 Group of Eight Industrialised Nations

GAM Gerakan Aceh Merdeka

GAO General Accounting Office
GDP Gross Domestic Product

GT gross tons

HA Humanitarian Assistance

HCA Humanitarian Civic Assistance
HIMI Heard and Macdonald Islands
HIS Humane Society International

HMFEG Hydrographic Meteorological and Oceanographic Force Element

Group

IAATO International Association of Antarctica Tour Operators

IAEA International Atomic Energy Agency

ICRW International Convention for the Regulation of Whaling 1946

IGY the International Geophysical Year

IHO International Hydrographic OrganizationIISS International Institute for Strategic Studies

IMO International Maritime Organization

IP Intellectual Property

IPCC International Panel on Climate Change

IPY International Polar Year
ISC Information Sharing Centre

ISPS International Ship and Port Facility Security Code

ISSC International Ship Security Certificate

IUU Illegal, Unreported or Unregulated (Fishing)

IWC International Whaling Commission

JAMAG Joint Agencies Maritime Advisory Group

JARPA Japanese Whale Research Program under Special Permit in the

Antarctic

JCG Japan Coast Guard

JDA Japan Defence Agency

JMoD Japan Ministry of Defence

JMSDF Japan Maritime Self-Defense Force JMSU Joint Marine Seismic Undertaking

JSDF Japan Self-Defense Force

JSO Joint Staff Office

JWC Joint War Committee

LARC Lighter Amphibious Resupply Cargo

LHD Large Amphibious Ship

LNG liquefied natural gas

LOSC United Nations Convention on Law of the Sea 1982

LSCI Liner Shipping Connectivity Index

MANA Maritime Needs Analysis

MIMA Maritime Institute of Malaysia

MOEC Multinational Operations and Exercises Centre

MSSP Malacca Strait Sea Patrols

NATO North Atlantic Treaty Organization

NDPG National Defence Programme Guideline

NDPO National Defence Programme Outline

NGO Non-governmental Organisation

NIDS National Institute for Defence Studies

nm nautical mile

NOC Naval Operational Concept

NWC Naval War College

OASIS Open and Analysed Shipping Info-System
OCS Offshore Constitutional Settlement 1980

OPK Ocean Peace Keeping

OSD Office of the Secretary of Defense
PACOM United States Pacific Command

Paris MOU Paris Memorandum of Understanding on Port State Control

PLA People's Liberation Army

PLAN People's Liberation Army Navy

PNE Peoples Network for the Environment

PNG Papua New Guinea

RAAF

PRC People's Republic of China
PSI Proliferation Security Initiative
QDR Quadrennial Defense Review
R&D research and development

RAASC Royal Australian Army Service Corps

RACT Royal Australian Corps of Transport

RAN Royal Australian Navy

ReCAAP Regional Cooperation Agreement to Combat Piracy and Armed Robbery

Against Ships at Sea in Asia

Royal Australian Air Force

ReMIX Regional Maritime Information Exchange

RFMO Regional Multilateral Fisheries Management Organisation

RIMPAC Rim of the Pacific

RMSI Regional Maritime Security Initiative

Ro-Ro Roll on - Roll off

RSN Republic of Singapore Navy

SCALOP Standing Committee on Antarctic Logistics and Operations

SCAR Scientific Committee on Antarctic Research

SC-CCAMLR Scientific Committee Convention on the Conservation of Antarctic

Marine Living Resources

SEACAT Southeast Asia Cooperation Against Terrorism

SEATO Southeast Asia Treaty Organization

SELB Strategic Energy Land Bridge SLOC Sea Lines of Communication

SMART Sense-Making Analysis and Research Tool
SMMC Strategic Maritime Management Committee

SOLAS International Convention for the Safety of Life at Sea 1974
SOMPR Southern Ocean Maritime Patrol and Response Program

SOVFA Status of Visiting Forces Agreement

SSA Ship Security Assessments
SSAS Ship Security Alert System

SSO Ship Security Officer SSP Ship Security Plan

SUA Convention Convention for the Suppression of Unlawful Acts against the Safety of

Maritime Navigation

TEU twenty-feet equivalent unit

Tokyo MOU Memorandum of Understanding on Port State control in the Asia-Pacific

Region

TS territorial sea

UAV Unmanned Aerial Vehicle

UN United Nations

UNCTAD United Nations Conference on Trade and Development

US United States

VFA Visiting Forces Agreement

VHF Very High Frequency

VLCC Very Large Crude Carriers

VSTOL Vertical Short Take-off and Landing

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WCO	World Customs Organization
WMD	Weapons of Mass Destruction
WPNS	Western Pacific Naval Symposium
WTO	World Trade Organization
WWI	World War I
WWII	World War II

PART 1

Introduction

Congress Opening

Joel Fitzgibbon

It is a great honour to be here today to open the Royal Australian Navy Sea Power Conference, the International Maritime Conference and the Pacific 2008 Maritime Exposition. Each of the events I have been asked to open today commands an important place on the international defence and maritime industry calendar. All three will make a valuable contribution to addressing the important maritime and naval issues we face in the coming decades.

Like the former Government, the new Rudd Labor Government places a high value on this event and the role it plays in bringing you all together, challenging your thinking, and promoting excellence in strategic policy and capability development.

The Australian Defence Force

As most will be aware, I was appointed Minister for Defence in late 2007 – a great privilege and honour for me, but also an opportunity which carries with it, enormous responsibilities.

The role of the Australian Defence Force (ADF) is to defend Australia, its people and its national interests. This is an important, difficult and often dangerous job. The ADF performs a wide range of challenging tasks in this role – some very close to home and others much further afield. Its people have always responded to these challenges magnificently and I know that the ADF's efforts are deeply appreciated by the broader Australian community. Certainly, in the time I have worked in the portfolio, I have been extremely impressed by the professionalism of ADF personnel and their sense of commitment, loyalty and duty.

The ADF has approximately 3500 soldiers, sailors and airmen and airwomen deployed overseas serving Australia's national interests. Around 500 of them proudly wear the uniform of the Royal Australian Navy. We also have approximately 500 ADF personnel currently undertaking border protection activities.

Each of them, in varying degree, face danger every day and I take the opportunity this morning to assure them that the Prime Minister and I, and indeed, the whole government, are committed to ensuring they have the equipment, the protection, the training and the support they need to perform their duties effectively, and as safely as is possible.

Today's Message

This is my first formal public address since becoming the Minister for Defence and I could have chosen no better forum in which to deliver it. As it is my first speech, I thought it timely to address the important question; what does the election of the Rudd Government mean for Defence and defence industry?

While the time available to me today does not allow me to go in to every detail, let me respond to that question by making four key points.

First, one of the new government's highest priorities is the commissioning of a new Defence White Paper. The strategic document from which we are working was developed in the late 1990s and released in the year 2000. The world has changed so much since then.

September 11, subsequent terror events in London, Madrid, Bali and Jakarta, the wars in Iraq and Afghanistan, the proliferation of nuclear weapons – including North Korea's nuclear tests and Iran's emerging nuclear program, emerging fragile states in the South West Pacific, rising tensions in the Taiwan Strait, and paradigm shifts in the global distribution of power. All these developments and events demand a review of our strategic outlook. Indeed, we should have had that review some time ago.

In the absence of the analytical rigour an up-to-date White Paper should provide, an apparent drift and disconnect has emerged between high level guidance and capability and force structure planning. The White Paper process will be essential to ensuring we have a sound basis for making the hard decisions needed to establish Defence's mission, and what capability it will need to do what we ask of it.

This brings me to my second point. Fulfilling the future capability needs of the ADF, will take money and plenty of it. That is why the Rudd Government has committed to growing the Defence budget by 3 per cent real over the course of the next decade. This is a big call given the broader inflationary environment we have inherited but the commitment is set in concrete.

That is not to say we will not be looking to find savings and efficiencies. Every Defence dollar wasted is a dollar not available for expenditure on crucial capability, or the needs of our defence personnel.

This takes me to my third and fourth points. The delays, cost blow-outs and failure to deliver we have experienced in Defence procurement in recent years cannot be allowed to continue. Promising to fix all the problems raises the bar high but that is no reason not to try. Of course, this does not necessarily mean a bigger stick, but rather the government will have a key leadership role to play in ensuring our capability ambitions are realistic, allocation of risk is fair and reasonable, the competitive environment is optimal, the labour market meets the needs of industry, and the regulatory environment is not self-defeating.

The Rudd Government will make sure that Australian industry, including small to medium enterprises, is given every opportunity to compete for work, based on open and accountable processes. Growing the Australian defence industry will be vital to maintaining a strong and effective ADF.

The government is committed to ensuring that a competitive defence industry is maintained in Australia so that a reasonable choice of suppliers is maintained. In particular, we want a strong, viable and responsive shipbuilding, maintenance and repair industry to be retained. Of course it would be wrong not to acknowledge there have been some good news stories on the procurement front.

I am pleased to see so many representatives of local defence industry here today. Many Australian companies - large and small - have made crucial and positive contributions to major defence projects. Many of them have been particularly important in delivering on rapid acquisition of new equipment and services to support ADF deployments, at a time of high operational tempo. The government appreciates the timeliness and responsiveness of industry in supporting these rapid acquisitions. We are all pleased that some of the equipment provided to the ADF by Australian firms is now capturing the attention of military forces worldwide -Austal's patrol boats and Thales's bushmaster vehicles are just two examples of the export potential of Australia's defence industry.

My fourth point today is about people. The single biggest challenge currently facing the ADF is its people and skills shortages. We must, as a government, establish effective ways of recruiting more people and retaining those we have invested so heavily in. All the capability in the world is nothing without the people needed to operate it, use it, and repair and maintain it.

The government has already demonstrated its commitment in this area, and made a down-payment, with the development of a trial program to deliver free health and dental care for ADF families. It is clear to me that we need more family friendly initiatives which will help Defence families take the decision to stay rather than leave when offered alternative careers in civilian life.

We must also become more creative on the recruitment front. Success will not so much be determined by the size of how much we spend, but how well we spend. Talking to Generation Y in their language through the mediums they rely upon for their information will be crucial to making gains. We may also need to find ways of giving them short-term exposure to the ADF without the commitment involved with the Reserves, the Cadets and the Gap Year initiative, as important as they are. These days, even a month-long commitment is an eternity to an Australian teenager.

We must also broaden the recruitment pool. Females make up more than 50 per cent of the Australian population, but just 13 per cent of the permanent ADF - they also leave earlier. Significantly, of the approximately 3500 ADF personnel currently deployed on global operations, only 164 are women. By not doing more to breakdown cultural barriers - both those which discourage enlistment and those which restrict female progression through the ranks, we are substantially reducing our potential recruitment pool.

In the 21st century women are heading up some of the world's largest corporations. Here in Australia, a woman now regularly acts as Prime Minister. Yet Defence continues to send the subliminal message 'come and join the Navy, Army or Air Force, but don't ever expect to lead your chosen Service'.

We all currently operate in a strong labour market where competition is intense. Organisations that are willing to provide talented and ambitious young women with a career path to the top currently enjoy a competitive advantage over the ADF in their quest to secure their services. Giving effect to cultural change in

an organisation like Defence is no easy task but it is a challenge we can't afford not to tackle.

The Royal Australian Navy

Of course, nowhere is our people and skills shortage being more acutely felt than in the RAN; and the theme of the Sea Power Conference reminds us of the important role the RAN will play in protecting the national interest and securing our region. Again, this underscores the importance of addressing the RAN's people crisis.

The conference theme is timely. The continuing growth of international trade has increased the importance of maintaining safety and security at sea. We all recognise that any interruptions to the global maritime trading system can have a rapid and detrimental economic impact – not just on the countries directly involved. For example, a disruption in the oil flow from the Middle East to Northeast Asia would quickly affect the Australian economy.

Australia's maritime geography has had a strong influence on our history and our view of the world. Our maritime waters are extensive, ranging from warm tropical waters in the north to the frigid Antarctic waters in the south. Today, despite having less than 1 per cent of the world's population, Australia has search and rescue responsibility for more than 10 per cent of the earth's surface. As a relatively isolated island continent, Australia is particularly dependent on maritime trade. Safety, security and freedom of movement at sea are critical to Australia's economic prosperity and security. So Australia must work with other nations to keep global trade moving and to promote 'good order at sea' issues. Not just for Australia, but the entire global community.

In terms of security, Australia's geography means that we need the ability to move offshore and reach beyond our immediate environment to help influence and respond to events. By securing our maritime environment we protect Australia's national interests while contributing to regional security and stability.

The professionalism and ability of our maritime forces enables us to carry out the full spectrum of maritime war fighting and security activities with confidence – ranging from high level combat operations, through to humanitarian assistance missions. Our maritime forces are flexible and adaptable, which makes them ideally placed to respond quickly and decisively to a range of situations. They extend Australia's reach and influence and have the poise and persistence to operate independently wherever they are needed.

Importantly, the government fully supports the decision to acquire two new amphibious ships and three air warfare destroyers for the RAN. These purchases will increase Australia's maritime reach, flexibility and adaptability – the critical attributes that I have just mentioned. In particular, the amphibious ships will be a massive boost to Australia's ability to deploy and sustain forces offshore. They will significantly enhance Australia's operational impact wherever they are deployed. In addition to an important combat role, they will also be valuable in support of humanitarian assistance and stabilisation operations.

The air warfare destroyers will be a powerful strategic force that will provide greater protection for ADF operations. Not only will they be capable of traditional combat roles (including the provision of air defence), they will also be significant command and control platforms. This function means that they will be able to support a range of other operations.

Continuing the theme of maritime capability, many of you will also be aware that I have directed the Department to start initial work on developing our future submarine capability. This will be a long-term task, but the increasing development of underwater capabilities in our region means that it is vital that we maintain our edge in submarine operations and that our anti-submarine capabilities continue to evolve at good pace. However, while this government is committed to the purchase of amphibious ships and air warfare destroyers. I want to reiterate my earlier comments about making sure that Defence spending is effective.

Many of you will know that I have ordered a review of several Defence projects. These reviews reflect my concerns about some of the financial and contractual performance aspects of some big projects. I want to emphasise these are not witch hunts. And they certainly do not reflect on the ability or competence of ADF personnel. Rather, they are a responsible review of projects - some of which should never have been commenced - and which are long over-due, well over budget and for which the capability those who commissioned them sought remains no more than a promise.

Conclusion

Let me close today by again saying how proud and excited I am about being Australia's Minister for Defence - and how much I look forward to working closely with a professional and dedicated organisation such as the ADF and the defence industry which supports it.

We will of course face a series of important challenges in the years ahead, but I am confident we can move forward together.

Welcome

Russ Shalders

On behalf of the Royal Australian Navy, I am very pleased to welcome you all to Sydney, for the Pacific 2008 Congress and International Maritime Exposition. This marks the start of what I hope will be two and a half days of topical, stimulating and highly relevant presentations.

I am very pleased to see an increasing number of overseas visitors with each conference. The differing perspectives that you bring are invaluable, and I thank you all for taking the time to travel to Sydney to be with us. I would also like to acknowledge the presence of many important serving and retired military leaders who have found time in their busy schedules to be with us. It may interest you to know that we have with us two serving Chiefs of Defence, seven serving Chiefs of Navy, four previous Chiefs of the RAN and high ranking representation of a further 23 Chiefs of Navy; in all, a total of 32 countries are officially represented here by military delegations.

I am also delighted to note that we have been able to extend invitations to senior members of the retired naval community, and I observe 24 of them have made it their business to join us. We also have a broad and very experienced number of delegations from industry, the commercial world and academia. I am also pleased to observe that a large number of serving officers and sailors from the RAN are with us today.

Our theme for the 2008 Sea Power Conference is *Australia and its Maritime Interests: At Home and in the Region*. No-one can doubt we live in a challenging new era, where the RAN is confronting a highly dynamic security environment, far more complex, uncertain and potentially more threatening than any we have faced before.

Navies have always worked together to meet common goals – the concept of naval coalition operations has existed for centuries and the RAN has a very proud and strong history of working with our neighbours, friends and allies. This tradition will become increasingly important as we head into an uncertain security future where the only thing we know to expect is the unexpected.

Australia's maritime interests in the region are growing, particularly as we work together with regional nations to promote security and prosperity. The imminent acquisition of a greatly enhanced amphibious capability, coupled with new air warfare destroyers, will significantly add to Australia's ability to influence and shape the strategic environment, and to project both soft and hard power when necessary. Both capabilities are inherently flexible, and I think will prove to be tremendously useful in a range of activities we may need to confront in the future.

Of course, our maritime interests are not simply naval. Australia is an island – and a trading nation – and we have a major maritime industry that is vital to our

economic prosperity. We, along with many countries in our region, face an ever increasing range of challenges in managing our maritime interests – issues that we propose to explore during this conference.

Last year (2007) was a good year, if not a landmark year, for the RAN. We continued our deployments to the Middle East, with the frigate HMAS *Arunta* currently on station in the North Arabian Gulf. We have also exercised command of Task Force 158, commanding all coalition warships in vital security operations in the Northern Arabian Gulf.

During this past year we completed the transition from the *Fremantle* to the *Armidale* class patrol boats – the lead ship of which is berthed just outside. Mid year, the Australian Government announced its decision to build three new air warfare destroyers and two large amphibious ships (LHDs) – a very significant investment in Australia's maritime capabilities. These decisions represent a watershed for the RAN, and we face an exciting future as these new ships are brought into service.

We have been very busy over the last 12 months, both at sea and ashore, but I wonder whether the people of Australia realise just how busy? I am concerned that the amazing, interesting and admirable work we do on a daily basis is not properly understood by our shareholders – the people of Australia. Like most navies, we suffer from an understandable, but unfortunate, lack of awareness by the general public. Perhaps it is understandable in part because our citizens now mainly travel by air, and have almost no exposure to ships or to the maritime industry. They have become unfamiliar with the vital role that the ocean plays in global commerce and security. In some respects, the value of a free and accessible maritime domain – and by extension, the value of the RAN – is viewed by the general public much like hot water or electricity in the home. Nobody notices until it is not there!

I believe that all navies have a challenge to overcome in this regard. We all need to get our message across to our constituents more effectively. In part, this conference aims to do just that. If I could focus for a moment on my navy, this lack of public awareness is one of the main reasons why we established the Sea Power Centre – Australia, to try to get the maritime message to our policy makers, to academia, to the media and to the wider Australian community.

The Future Security Environment

It is self evident that major power relations and US strategic primacy have underpinned the security and stability of the Asia-Pacific region for some time. The United States will continue as the dominant global, economic, technological and military power into the future. However, this global dynamic is changing, with the economic rise of India and China, the re-emergence of Russia and a more proactive approach to security by Japan. Australia, like many other countries, will need to take notice of these changes as we manage our way forward in the evolving strategic power dynamic

Sea power, and the way that navies operate in the 21st century must also adapt to this evolving environment. The judicious and measured use of sea power will require much greater levels of global cooperation, increased interoperability and a better shared understanding of the nature of the threats we face. All of these ideals and aspirations go to the heart of our conference theme.

Australia does not currently face any conventional military threat, but we are not complacent. Terrorism, the proliferation of weapons of mass destruction and the need to monitor fragile states are all issues of serious concern. That said, I believe we have to be cautious that our thinking does not get skewed by the war on terror. While that conflict is 'here-and-now' - and is certainly serious - the rise of such unconventional terrorist type threats has not been at the expense of traditional, state based military threats - it has been an additional challenge. Security is not a zerosum game. I observe that there remain a number of potential flashpoints around the globe which could require conventional and large scale military intervention with little or no warning. We cannot afford to focus exclusively on terrorist threats.

The bottom line is that we face an increasingly uncertain future, with a mix of traditional and non-traditional threats to our security. This requires us to be prepared with a range of responses up to, and including, lethal force. In Australian parlance, we call these military response options. We prepare these options against a range of likely and not so likely contingencies. Some of these challenges we may need to face on our own, but many will need to be dealt with in conjunction with others.

As the Minister for Defence said this morning, when explaining the need for a clear view of our Defence strategy, navies are uniquely placed to offer the government a large number of options in shaping and dealing with the future uncertain strategic environment.

Minister Fitzgibbon highlighted the critical importance of the maritime domain, and consequently of maritime forces, to Australia. I would add that we will increasingly find that maritime affairs distant from our shores will be directly relevant to our prosperity and security. For example, the collective protection of the globalised shipping industry is a challenge for all countries. Increasingly, I suspect, nations and navies will be working together protecting the 'system', rather than working solely in support of direct national interests.

I do not suggest that these 'wider interests' detract from the overriding responsibility of any navy to act in support of national objectives. Such actions may well involve state-based conflicts, or high-end combat. We must always be prepared for such activities. The capabilities to effectively conduct high-end war fighting must underpin everything else we do.

In this context, a key - yet little understood - attribute of maritime forces is that they have a vital security role all the time - not just when involved in combat operations, at high or low levels.

Australia is in the fortunate position of being on very good terms with our near neighbours. We aim to be open and transparent in our dealings with other nations and I am proud to note that the RAN has always played a significant role in building confidence, capacity, understanding and rapport between nations.

Our navy's ships, submarines and aircraft have a long and proud history of involvement in operations and exercises with many different nations. The RAN is very well placed to work together with regional navies to meet traditional, new and any emerging common challenges, be they military, diplomatic or constabulary. On a daily basis, we act as ambassadors for Australia, often at the forefront of diplomatic engagement, both in the region and further afield. This subset of the 'naval presence' mission is a vital and continuing role and I expect we will be doing a lot more in the future.

Naval Force Structure

Let me conclude my opening remarks with some brief commentary on naval force structure.

Some commentators claim that increasing submarine and missile capabilities have made surface ships obsolete. In Australia's case, some suggest that we should draw back to protecting the moat around our northern coastline, and rely on submarines and combat aircraft to secure our sovereignty.

I would argue that the future is not nearly that simple. A sea denial posture fails to capitalise on the enormous potential of the sea and the strategic advantage imposed by our geography. Maritime based forces – and again I do not just mean the RAN here – have much more utility if used to control the sea – not merely to deny its use by an adversary.

Further, the capacity that maritime power provides should be viewed as far more than an insurance policy in case of war. We need the ability to project power – both hard and soft – in support of our national interests. Given the inescapable effects of geography, that projection will inevitably be maritime in nature.

I do not for a moment underestimate the threats we may face – submarines remain difficult to counter and anti-submarine warfare (ASW) has re-emerged as a strong focus for our research and capability development areas. We held a very successful ASW exercise off the coast of Western Australia late in 2007, involving three *Collins* class submarines. We are seeing some very positive developments in netted-ASW research – linking multiple sensors to build a better picture of the underwater environment. We do recognise the submarine threat is challenging, but I do not think it comes close to rendering surface ships obsolete. Surface ships and submarines are both vital components of a balanced force. The RAN does need to be a balanced force in order to assert sea control in our area of paramount defence interest – and further afield if necessary.

The Minister stated earlier this morning that the government is committed to a new Defence White Paper. I expect a renewed focus on Australia's fundamentally maritime strategy, and I anticipate this strategy will go beyond one of sea denial. I am hopeful that it will endorse the need for a meaningful capability to project power offshore in order to shape, deter and, if necessary, respond to threats and to help our allies and friends. The mobility, flexibility, adaptability and persistence offered by sea power is something we must exploit to our best advantage.

In this regard, our planned acquisition of two large LHDs is a significant step in the right direction. These ships will allow us to exploit maritime manoeuvre and they will give us a capability to operate widely in a range of non-combat tasks, from humanitarian aid through to coercion. The *Canberra* class LHDs will provide a quantum leap in utility, flexibility and versatility.

In regard to our aspirations to be able to exert sea control, Australia has been fortunate to be part of the dominant Alliance which, for the last few decades, has reduced the likelihood of the Australian Defence Force having to fight to gain sea control. However, that fortunate circumstance may not last. As I stated earlier, we live in a time of enormous strategic change. I expect that we will increasingly need capabilities – primarily maritime and air – to fight for sea control so that we can use the sea to maximum advantage in times of conflict.

The Minister has already announced initial work on capability options to replace the *Collins* class submarine. As outlined earlier, I strongly believe that we must maintain a balanced fleet and so we also need to look at options for when the *Anzac* class frigates decommission. While it is increasingly difficult to predict the future, I think it is safe to say a new surface combatant class will be required. The presence, versatility and flexibility of surface warships mean that they are, in my view, absolutely critical to our ongoing security, especially given our geography. What shape, form and number of hulls we need must be refined, and this work needs to commence now.

Conclusion

Maintaining an effective navy is not cheap. As I mentioned earlier, it behoves us all to help educate our public about the return on that investment. It is, I believe, clear that the future for all of us is less certain, and threats more diverse, than ever before. In this uncertain future, Australia must retain a balanced, professional and well respected navy that is capable of shaping, deterring and, if necessary, responding to whatever threat our government calls upon us to deal with.

Ladies and gentlemen that concludes my remarks this morning. A key theme that I think we all agree on is the importance of all our nations working together to meet common challenges. I hope that the 2008 RAN Sea Power Conference helps in this regard.

I thank you all again for making time available to attend our conference. I trust you will find the next few days rewarding, challenging and enjoyable.

PART 2

Setting the Scene

The RAN and Australia's Security: What Does the Future Hold

Tim Huxley

First of all, I would like to thank the Chief of Navy, Admiral Shalders, and the organisers of this conference, the Sea Power Centre – Australia, for inviting me to speak here this morning. It is a tremendous honour and a privilege again to have this opportunity to address this, the most important gathering of naval experts in the Asia-Pacific region. If I add any value to these proceedings it will not be because I am an expert on navies. Rather, I will be speaking as a long-term student of the international relations, security problems and armed forces of the region. I will also be speaking as the regional director of the world's longest-established strategic studies thinktank, the International Institute for Strategic Studies (IISS). Amongst other things, we at the IISS pride ourselves on being international in our perspective, as well as independent and non-partisan. We do not have any axe to grind other than our interest in fostering sound decision-making on matters of international security. I hope that this independent, international perspective might be of some value.

My focus today is on the major factors that should shape – and I expect will shape – the navy that Australia develops over the next 25 years. Broadly, I can see four important categories of influence on the development of Australian naval capabilities: the nature of the evolving global strategic environment; developments in the Asia-Pacific region; the domestic environment in which Australia's security policy is made; and the nature of Australia's foreign and security policy, including levels of defence spending and the structure of the Australian Defence Force (ADF) as a whole.

To summarise my argument in advance: the development of Australia's naval capabilities will almost inevitably take place within parameters that place considerable constraints on policymakers' leeway. However, the next 25 years – a generation in terms of human timescale – will witness major changes in each of the spheres which I will examine, and there may be both opportunities and pressures for significant changes in the Royal Australian Navy. Australia, though, will still need a navy able to operate effectively in three overlapping spheres: as a constabulary force protecting national sovereignty; as a regional navy able to help build confidence with the maritime forces of other Asia-Pacific states; and as a significant contributor to deterrence and coalition operations with international allies and partners outside as well as within the Asia-Pacific region.

Let me now look in some detail at those key influences on the future evolution of the RAN that I mentioned just now.

The Global Strategic Environment

Australia's strategic environment is likely to undergo significant changes over the next quarter-century. At the global level, the relative importance in the international system of Australia's main ally, the United States, and the strength of its international leadership, may decline. In part, this will be because of the growing economic strength of other major powers, notably China and India. Other significant developments might include the possible resurgence of Russia (though this country's demographics do not suggest a surging power), the emergence of Brazil as an important economic and perhaps political player in the Western Hemisphere, and the incremental integration of the European Union into a federation with greater strategic weight internationally.

The United States will find that the economic strength and military capabilities of other powers increasingly challenge its own. Because of this, but also due to the controversial embroilment in Iraq and different attitudes towards the challenge of jihadi terrorism, climate change and other issues, US 'soft power' – the ideological sway of American political and social norms – will not necessarily retain its global preponderance. In this emerging international system, economic, military and cultural power will be considerably more diffuse. The United States, with support from some allies, will continue efforts to build a global coalition against what it sees as key threats – notably terrorism and weapons of mass destruction (WMD) proliferation. We have already seen manifestations of this in the expansion of NATO's role and US proposals for a global maritime partnership. But these initiatives only have a chance of succeeding if the United States recognises the diverse interests and concerns of its allies and other important international players.

There will be losers as well as winners in the race for riches amongst states over the next 25 years. Many underdeveloped states and regions are likely to remain underdeveloped because of their unfortunate location, lack of resources, over-population and poor governance. In many cases, pandemic diseases – notably but not only AIDS – will exacerbate desperate predicaments, opening the way for weak states to collapse entirely. Ungoverned territories could become a much more serious problem.

International trade will continue to expand, and most of this trade will be carried by sea. Ever more of global manufacturing will come to depend on highly-sensitive supply chains, implying that disruptions to sea trade will cause major economic grief. The movement by ship as well as pipeline of hydrocarbon energy resources to fuel expanding economies will grow substantially. States and economic blocs will increasingly be concerned over the security and reliability of energy supplies. There may be increasing tensions over access not only to energy resources, but also water supplies.

Primarily because of anxieties over potential maritime terrorism and WMD proliferation in the wake of the 11 September 2001 terrorist attacks on the United States, but also for reasons of resource exploitation and environmental protection, the maritime environment is likely to become much more highly-regulated through

changes in international maritime law and also practical initiatives led by the West. However, the key to successful regulation will be to ensure that it serves the interests of poorer littoral states as well as rich users of the sea, and that it does not leave emerging economic and military powers - notably China - feeling that it is a Western strategy aimed against them. Notions such as comprehensive maritime domain awareness may be not be universally appealing as they would clearly have a role in maritime warfare as well as in ensuring peacetime maritime security against low-intensity concerns.

Nuclear power for civilian purposes will make a major resurgence, for both economic and environmental reasons, but this will be a double-edged sword, posing security challenges as well as providing large amounts of relatively cheap energy. Nuclear weapons proliferation will remain a major threat to global security and stability. In 25 years' time, several new nuclear-weapons states may have joined the existing eight. It would not be surprising if there were a dozen nuclear-armed countries in total by the early 2030s. At the same time, the capabilities of existing nuclear weapons states will become more sophisticated. As well as continuing modernisation of US, Russian, British and French nuclear forces, we are likely to witness the Chinese, Indian and Israeli nuclear deterrents going to sea with their submarine-based elements giving assured second-strike capability. Missile defences will become widespread, possibly triggering compensatory offensive developments in the nuclear forces of second-tier nuclear weapons powers, and space warfare capabilities will expand considerably. It is unclear whether or not the complex pattern of deterrent relationships that evolves will be stable.

The other strategic focus of the current decade, international terrorism, will not disappear. Notions of an existential struggle with violent jihadists may recede, as a result of continuing intensification of security measures and intelligence cooperation, the successful implementation of strategies aimed at diverting disillusioned religious minorities from violence, and continuing fissures among groups inclined to terrorism. Much will depend, though, on how the conflicts in Iraq and Afghanistan evolve, and on progress towards a durable solution to the Palestinian question. The spectre of mass-casualty terrorism will remain part of the strategic landscape, and the capacity of calculating non-state actors from a variety of ideological backgrounds to commit large-scale atrocities will remain.

However, if the accepted scientific assessments are correct, climate change and its security implications may eclipse terrorism as a global security concern over the next 25 years. Drought, floods, forest fires, declining food production and the loss of inhabited islands and coastal areas as the sea-level rises may provoke unregulated population movements and political instability as well as inter-state tensions.

Overall, it seems fair to suggest that the next 25 years will generate complex and messy security problems, and that richer countries will justifiably be expected by their own populations and the 'international community' to play key roles in managing if not resolving these problems. Yet, it is by no means certain that the United Nations and other international institutions will prove capable of playing a more effective role in managing international security issues. Ad hoc coalitions are not likely to be any less important than they have been during the present decade.

The Strategic Environment of the Asia-Pacific

Australia has the good fortune to be located on the periphery of a region which by and large seems set to continue prospering economically over the coming quarter-century. However, key security issues in the region remain unresolved: Taiwan; North Korea's nuclear weapons program; and disputes over maritime territory, notably in the South China Sea. The prognosis for these disputes currently looks more optimistic than it did a decade ago, but the potential for regional conflict involving major powers remains. The Asia-Pacific region will also generate its fair share of new security challenges over the next 25 years.

We cannot assume that this current decade's economic growth trajectory will continue for either China or India. China will need to begin reconciling its divergent political and economic systems, and will face environmental catastrophe unless it acts to regulate its polluting industries. India faces important infrastructural challenges. On balance, though, it seems likely that the Chinese and Indian economies will continue to expand, fuelling their rise as the region's new great powers. How they will use their new power is the big question. The jury is still out, particularly with regard to China. Meanwhile, Japan – with its ageing population, relatively slow growth and incoherent international outlook – seems set to enter a phase of what has been referred to as 'elegant decline'. The marginally more assertive international role that Japan has played this decade may not be the precursor of anything much more significant.

New medium powers, strong both economically and militarily, will also arise in the region. Korea – almost certainly unified, possibly nuclear-armed, probably aligned with China, and perhaps still suspicious of Japan – will be the premier state in this category. Vietnam may also attain medium-power status.

Closer to home, it is Indonesia's weakness rather than its strength that should be Australia's concern: a prosperous, democratic Indonesia is certainly extremely unlikely to pose any serious threat. Whether Indonesia will enjoy the faster economic growth that has characterised Southeast Asian states such as Malaysia, Thailand and Vietnam is still unclear. If it continues on the trajectory we have witnessed during the present decade, Indonesia could well overcome the drag on its economy of corruption, previously over-centralised government, the legacy of military rule and ethnic, religious and separatist conflict. This is by no means assured, but the dire predictions of Indonesia's disintegration, common in the immediate aftermath of Suharto's overthrow, no longer seem credible. There are grounds for cautious optimism that Indonesia will at least continue muddling through. Into the mediumterm, though hopefully not for the whole of the next quarter-century, Indonesia's low-intensity security problems of separatism in Papua, rumbling ethnic tensions in Sulawesi, Maluku and Kalimantan, and violent jihadi factions will still be evident.

Varying degrees of instability will continue to plague other parts of Southeast Asia – notably the Philippines and Myanmar – but also perhaps Malaysia, where there may be increased questioning of the inter-racial agreement that has underpinned the country's political system and economy since the 1960s.

Elsewhere in Australia's immediate region, in East Timor, Papua New Guinea and the Southwest Pacific, fragile statehood teetering on the brink of collapse will remain the norm. Climate change, pandemic disease, rapid population growth and accumulating poverty will make the situation progressively worse in many cases. Australia will, like it or not, be continuously involved in rescuing these states and their people from the diverse low-intensity security challenges they face.

The Asia-Pacific's regional 'security architecture', a framework of institutions long characterised by multiple security and defence arrangements with diverse intents and formats, seems likely to remain in flux. Bilateral agreements, ranging from formal treaties to training arrangements, will link many regional states not only to each other but also to powers outside the region. Multilateral arrangements include not only the well-established Five Power Defence Arrangements and ASEAN Regional Forum, but also nascent regional institutions with security roles such as the ASEAN Political-Security Community, the East Asian Summit, the Shanghai Cooperation Organisation and even the Western Pacific Naval Symposium. In various ways, these groupings may come to play more important parts in assuring regional stability. And we at the IISS intend that our own Shangri-La Dialogue will continue to provide an important annual forum for the region's defence ministers and military chiefs. But while these institutions may help to manage tensions in the region, underlying inter-state rivalries, wide variations in national viewpoint on security matters and the absence of common threat perceptions will rule out any grand regional security entente.

The regional distribution of military power will become increasingly complex as Northeast and Southeast Asian states develop their armed forces. Quite apart from the nuclear dimension, with economies across the region continuing to grow, and amidst inter-state tensions which in many cases will remain unabated, Asia-Pacific states' defence spending will continue to expand in real terms, funding major military procurement programs. The better-funded armed forces in the region - those of China, Taiwan, India, Japan, South Korea and Singapore - will continue to modernise their organisational, logistical and training arrangements, as well as acquire new command, control, communications and intelligence, surveillance and reconnaissance systems, in order to take advantage of the opportunities that contemporary technology offers for developing hard-hitting 'networked' forces. Increasingly competent national defence industries and defence science establishments will support these efforts. There are clear signs already of reactive military developments between certain combinations of Southeast and Northeast Asian states, and confidence-building measures and forums will need to work hard to help avert sub-regional arms races.

There will be significant developments in the maritime sphere as regional navies grow. China's People's Liberation Army Navy (PLAN) will focus particularly on improving its submarine capabilities, commissioning additional nuclear-powered hunter-killer and ballistic missile launching boats, while Russian- and locally-built diesel-electric vessels will continue to enter service. Developing an aircraft carrier capability remains a long-term strategic priority for China, and construction (or refurbishment of the ex-Soviet *Varyag*) could start this decade. The PLAN will also deploy substantial numbers of highly-capable locally-built escorts to supplement its Russian-built *Sovremenny* destroyers.

Meanwhile, Japan's *Hyuga* class 'helicopter-carrying destroyers' – roughly equivalent in size and capability to the Royal Navy's HMS *Ocean* helicopter carrier will provide highly flexible new platforms for anti-submarine warfare and amphibious operations. Japan is also developing its own national maritime patrol aircraft – the so-called P-X – to replace its large number of P-3C Orions. Though the Japan Maritime Self-Defense Force (JMSDF) will contribute to Japan's national ballistic missile defence capability through its AEGIS-equipped *Kongo* class destroyers, a significant shortcoming of the present Japanese Fleet is its lack of comprehensive organic air cover, severely reducing its potential usefulness for sea lines of communication protection. This could be remedied in the medium-term by using modified *Hyuga* class ships as platforms for the vertical short take-off and landing (VSTOL) version of the F-35 joint strike fighter. But political considerations will probably prevent this.

South Korea's navy will be at the forefront of Seoul's efforts to develop power-projection forces. Despite Korea's much smaller population and economy, in the long-term its navy will move closer to Japan's in size and capability. The *Dokdo* class LPHs are very similar in size to Japan's *Hyuga* class ships, and could similarly carry F-35s eventually. Other important classes, now entering service, which will be mainstays of Korea's 'Strategic Mobile Fleet' are the AEGIS-equipped KDX-III destroyers and *Sohn Wonyil* class air independent propulsion submarines.

Naval developments in Southeast Asia will, unsurprisingly, occur on a smaller scale. The only Southeast Asian navy with a clear and realistic development program is Singapore's though there are constraints, particularly in terms of personnel, on its further development. However, over the next generation we can expect to see it modernise its submarine flotilla, bring a new class of stealth corvettes into service, and deploy diverse unmanned vehicles.

The Domestic Policy-making Environment

Third, there is the question of the domestic environment in which Australia's security policy is made.

I think it is axiomatic that over the coming 25 years Australia will remain a flourishing and stable parliamentary democracy, though the form of its democracy could well change to that of a republic with an obvious implication for the title of this country's navy. This democratic domestic context suggests that radical change

in Australia's international orientation or security policies is unlikely except in the event of cataclysmic developments globally or in the region.

It is also highly likely that Australia will remain one of the region's more prosperous countries judged by gross domestic product per capita, though the wealth differential between Australia and the fast-growing economies of Northeast Asia and some Southeast Asian countries will continue to narrow. Australia's population is not likely to grow considerably: despite continuing net immigration, it looks like the population will be around 25 million in a generation's time, in the early 2030s. The population will also continue to age. All this means that the size of Australia's economy will continue to decline relative to the expanding economies of more populous, younger regional countries. Australia's economy will continue to depend heavily on international trade. The country will probably remain a net importer of oil and a net exporter of natural gas. And Australians will continue to live overseas and travel, probably in larger numbers than ever before.

Turning to questions of ethnicity and identity, people of European descent will continue to make up the great preponderance of Australia's population 25 years from now. However, continuing immigration from the region means that people of Asian origin will make up a more significant proportion of the population by 2033 though they will still collectively constitute only a large minority. Alongside Australia's strong economic ties in its region, this evolving ethnic mix will gradually change the way Australia is seen in the region and how Australia views the region.

All these domestic factors will feed into the process by which Australia's foreign and security policies are made, helping to shape the navy of the future.

Australia's Foreign and Security Policy

More than ever, over the next generation, it is uncertainty that will characterise Australia's strategic environment. In the face of this uncertainty, it will make sense for Australia to cultivate a wide range of security partners among states with similar international interests, outlooks, and values, both regionally and further afield. Some commentators on Australian security matters have made far too much of a supposed dichotomy between global and regional approaches. It is imperative for Australia to cultivate long-term security as well as economic partnerships with Asia-Pacific states, whether these are in Southeast, East or South Asia, or the Southwest Pacific. Southeast Asia and the Southwest Pacific, in particular, are not only Australia's figurative backyard; they are also places where Australia's economic and military strength can be a significant factor in the regional equation. It is worth remembering that Australia's defence spending is still equal to that of Indonesia, Malaysia, the Philippines, Singapore and Thailand combined. In the Southwest Pacific, Australia will probably and quite justifiably look to New Zealand to take a greater share of the burden.

Within the broader Asia-Pacific region, Australia is already becoming accustomed to closer strategic collaboration with Japan, a relationship encouraged by the United States within a trilateral framework. By pursuing this course, Australia

may play a significant role in bolstering the US regional role and in helping to draw Japan out into the region in strategic terms. But in the future, India and perhaps Korea will become more important security partners as well.

Australia will need to avoid strategic alignments that might convey a sense of hostility towards China. Beijing's international policies are not always reassuring, and aspects of its defence policy continue to lack the transparency many observers – particularly the US Government – would like to see. However, China is not an adversary. Its future strategic direction remains open, and it would be a tragedy for the world and particularly for this region and for Australia if assumptions about her aggressive intent became a self-fulfilling prophecy.

Despite the need to intensify security relations within the region, Australia would be foolhardy to calculate either that the world beyond the Asia-Pacific region is irrelevant to her security, or that she can necessarily manage challenges in the region with only regional partners. The nature of many emerging threats will be global, and the argument that it is best to deal with them as far from Australia's shores as possible is a strong one. Moreover, in an increasingly nuclear-armed world, Australia will be much more secure under the umbrella of extended deterrence provided by the United States alliance than would be the case otherwise. And if Australia expects reliable allies, she will need to go on demonstrating her commitment to helping them, sometimes outside the Asia-Pacific region. There will be difficult choices to make regarding the scale of the capacity that the ADF maintains or develops to contribute to such coalition operations. However, it is hard to imagine the Australian community supporting contributions to distant operations on a scale much larger than those Australia has sent to the Middle East since 2003. And like any self-respecting sovereign state, Australia will need to retain the capacity politely to decline involvement in strategic initiatives which do not seem to be in her national interest or, in some cases, to make only a token contribution.

What are the implications for Australian defence policy and the ADF? Perhaps the most important overarching implication is that Australia will need to use its limited defence resources effectively, given the restricted scope in peacetime for increasing defence spending. Jointery and network-enabled operations will be the key. Uninhabited platforms will also play more important roles. Maybe this point about using resources effectively is obvious. But I know that some people have questioned whether Australia does get good value for its defence dollar compared with the city-state where I am based. Singapore spends less than half what Australia does on defence and has less than a quarter of Australia's population, yet manages to generate a balanced force structure including a well-equipped army of six divisions when fully mobilised, a modern air force with more than a hundred combat aircraft and relevant force multipliers such as airborne warning and control system aircraft and in-flight refuelling, and a small but efficient navy with comprehensive capabilities. Clearly, given the hugely different geographies, interests and societies of Australia and Singapore this is a case of comparing apples and oranges, but it nevertheless raises interesting questions about value-for-money.

Australia's Navy of the Future

My conclusions on what sort of navy Australia will need may seem unsurprising. In overall national terms, the absence of a clear-cut, high-likelihood acute threat is a great luxury that allows relatively low defence spending and allows government and people alike to get on with the important things in life. However, for defence and naval planners it means that they have to think about dealing with a wide range of diffuse, chronic, low-intensity security concerns, with extremely slender resources. The knock-on effects of the war on terror during this decade may have eased the budgetary problem slightly, but the problem of where to focus remains.

Australia's excellent and clear maritime doctrine helps, by listing the RAN's main missions. All three will remain crucial during the next generation. I will be interested later in this conference to hear what Admiral Goldrick says about Border Protection Command and its future. That organisation seemed to me to represent a workable solution to the problem of integrating the activities of diverse agencies operating in a coastal protection role to interdict traffic in people, narcotics and other illicit goods, and – crucially – protect Australia's preponderantly coastal cities and population against potential seaborne terrorist attack. However, change in favour of a dedicated coast guard could free the navy to focus its sovereignty protection role further afield, in the exclusive economic zone and in the Southern Ocean and Antarctica, where there may be new challenges in terms of securing maritime resources.

In terms of contributing to the security of Australia's region, the RAN will need to keep building on existing links with the navies of Asia-Pacific states to develop joint capabilities in low-intensity spheres such as humanitarian relief, search and rescue, anti-piracy and counter-terrorism.

Ultimately, though, navies are about deterrence and war-fighting, and the RAN will need to maintain its capacity to fight and win in conjunction with other ADF elements and with allies. To combat developing threats effectively, and to help ensure that Australia maintains strategic partnerships that will be vital in the event of the regional equation becoming adverse in the future, Australia's navy will need in the long-term to retain the capacity to contribute forces to more distant coalition operations beyond, as well as in, the Asia-Pacific region.

It will be important to avoid being stuck in the rut of a 'replacement syndrome', which could stifle ideas about new types of platform and weapons systems, or changing the balance between them. However, in terms of force structure, the wide spectrum of tasks that the navy will have to perform suggests the need to maintain substantial sub-surface, surface and amphibious capabilities. Within conceivable budgets, there will not be great leeway for developing major new capabilities. One important area of controversy is likely to concern whether the Fleet Air Arm should regain a fixed-wing capability and fly F-35s as well as helicopters from its new 'flattop' amphibious ships. It will clearly be necessary to conduct a realistic assessment of the opportunity costs: what capabilities would the RAN need to relinquish in order to provide itself with a new organic fixed-wing air capability? Given that it is hard

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to imagine Australia's navy operating in a high-intensity war-fighting role beyond land-based air cover except as part of a coalition including US aircraft carriers, it might be judged more important for to have a good number of versatile destroyers and frigates.

Strategic Issues Facing Australia

Greg Sheridan

I agree with Dr Huxley that there is no contradiction between Australia's role as a regional power and its global commitments. Australia is the 14th or 15th largest economy in the world and a key member of the US alliance system. It needs to make an international contribution. Moreover Australia's leaders have always recognised that our particular security is intimately tied to the global security order and we have always prospered when that international order reflects our values and accommodates out interests. The Middle East, for example, is an area of direct strategic interest to Australia and we are capable of making a contribution there as well as regionally. And of course our global capabilities and commitments increase in many vital ways our leverage within our own region.

Most future trends analysis is not worth the paper it is written on. Look back at the futurology of 20 or 30 years ago and you will see my point. This is because futuristic analysis has the greatest difficulty comprehending strategic discontinuities, or to put it in a more academic fashion – stuff happens.

I propose in this paper therefore merely to suggest what I think are some significant likely strategic discontinuities as well as some radical strategic continuities. But first a word on the strategic context. The terror attacks of 11 September 2001 ushered in, or at least revealed, a new strategic environment. Some strategic analysts, suffering the familiar syndrome of paradigm paralysis, argue that terrorism is not really a strategic threat, that the worst damage it can do is similar to that of a bad storm. This analysis is completely wrong and fails to take into account the inter-action of terrorism with traditional geo-strategic concerns. The age of terror has already produced two large-scale conventional wars - Afghanistan and Iraq and a host of demanding counter-insurgent campaigns. It has also produced a civilisation-wide challenge to the Islamic world, especially the Arab Islamic world in the Middle East. Nonetheless 11 September 2001 did not abolish traditional geostrategic questions such as China/Taiwan or India/Pakistan or North Korea. The challenge for analysts now is how the post-11 September 2001 world inter-acts with the traditional geo-strategic issues. A perfect example is Iran. It is the chief state sponsor of terrorism, especially but not exclusively through Hezbollah. It is also a major state actor in the Middle East geo-strategic equation. If it gets nuclear weapons how do we evaluate Hezbollah then? We think of terrorists as non-state actors, but as in the case of Hezbollah and Iran, they can also be instruments of state power. Similarly, the traditional geo-strategic view of India and Pakistan centres on how many divisions, and how many nuclear weapons, each state has and what this might do to political incentives for each state. But the post-11 September 2001 world sees the Taliban, and to some extent Al Qaeda, changing the very nature of Pakistan, such that its possession of nuclear weapons takes on a wholly new light.

So today I propose to consider some radical discontinuities and some radical continuities. Radical continuities are conditions or trends I believe will continue, even though conventional analysis says they will be reversed.

The first radical continuity is the continued dominance of the United States as the prime mover in global politics and the central player in Asian security. Analysts today routinely talk of US decline, either absolute or relative. I think both these lines of analysis are wrong, and in 50 years time the United States will be as central to the world, and to Asian security, as it is today. Consider these relativities. Today there is one American for every four Chinese. By 2050 there will be one American for every three Chinese, and the American population will be younger than the Chinese population. Demographics are destiny and in the Western world the United States has unique demographics. It has the highest birth rate in the West and an inexhaustible supply of Latin American immigrants. It is uniquely placed to continue to benefit from and lead globalisation. It dominates global culture and will continue to do so. The US military tradition, and vast military budget, the problemsolving nature of its culture, its global reach, the dynamism of its capitalism all far out weigh any temporary problem arising from the sub-prime mortgage crisis or similar matters. Similarly the US alliance system is superbly flexible and perfectly adapted for Asia's needs. It is the de facto multilateral security institution, and its strength is one reason why alternative regional security mechanisms, such as the ASEAN Regional Forum, have all been so anaemic. The flexibility of the United States alliance system allows South Korea and Japan to be subsumed into one underlying structure, even though it's notionally a series of bilateral alliances. No other structure could possibly do this. All of this is good news for Australia as we are such a close ally of the United States.

The second radical continuity is the continuation of terrorism as an existential threat. The Islamist terror ideology has been hundreds of years in the making and has millions of adherents. Unlike Marxism, it cannot be falsified in the material universe because it is essentially a religious ideology. The best counter-proliferation experts in the world continue to believe that the most likely source of a nuclear detonation is terrorists eventually getting their hands on a nuclear weapon. Weapons of mass destruction experts such as Robert Gallucci believe this is more likely than not to occur in the next five to 10 years. Eventually Al Qaeda will get hold of a nuclear weapon and detonate it in New York, London or Sydney. When that happens, absolutely everything in the world is changed, strategically and politically.

The third radical continuity is that of continued conflict and instability in the Middle East which will continue to engage Australia. There is no prospect of an Israeli-Palestinian peace because too many Palestinian leaders, and Arab and Iranian leaders, still do not accept Israel's right to exist and believe they can defeat Israel in the long run through demographics. Throughout the broader Middle East, with the exception of a couple of tiny states in the Gulf, all ideologies are exhausted except Islamism. Nationalism secularism, socialism, pan-Arabism, developmentalism

- are all exhausted in the Arab world. The only ideology left standing is Muslim Brotherhood/Al Qaeda style Islamism.

The fourth radical continuity is the continued success of Indonesia and therefore of Southeast Asia. This is an on-balance judgement but based on the nature of Indonesian Islam, the maturity of the Indonesian political class, the resilience and continued growth of the economy, the deep support of Australia and the United States, and the re-election of the president at the next election, Indonesia in my view will continue to grow and stabilise as a democracy. If this happens Southeast Asia becomes predominantly middle class. This is a challenge for Australia in keeping the technology edge in our military, but the challenges of a successful Southeast Asia are far preferable to those of an unstable or failing Southeast Asia.

The fifth radical continuity is ongoing crisis in the Melanesian world. From East Timor through the Solomon Islands to Fiji there is a profound economic, governance, health, institutional and political crisis, and it will continue. There are 7 million Melanesians and only 21 million Australians, so the scale of the problem for us is much greater than that that posed by the Caribbean to the United States. Australia will be continuously involved.

The sixth radical continuity will be the continued spread of democracy in Asia, which will reduce the cultural distance between us and our neighbours.

Let us look at some radical discontinuities. The first is that Iran within a few years will acquire nuclear weapons. Although I am a supporter of sanctions I do not believe they will stop Iran from getting them. Nothing will stop it, short of United States or Israeli military action, and the recent US National Intelligence Estimate was designed to forestall that. At the very least a nuclear armed Iran will be far more confident in supporting terror, and a huge challenge to the international security order.

A good news radical discontinuity will be India's rise. India is destined to be a great power by every measure – population, economy, military power, cultural power. In cultural or soft power it is much better placed than China. The prestige of India's democracy, and the penetration of its culture into the Western mind, is a resource China does not have and they have huge strategic consequences. It is because of India's soft power that the United States is willing to completely upend the international rules for governance of nuclear weapons states in the US-India nuclear deal. Imagine the United States doing that for China, or even for Japan. The rise of India is the first rise of a great democratic power since the United States itself in the 19th century.

A potential radical discontinuity is China. We know what in 20 years or even 50 years India's governance will look like. It will be a parliamentary democracy and a federal system. We have absolutely no idea at all what China's governance arrangements will look like. China's historical pattern has been periods of stability followed by periods of gross disorder. That syndrome haunts the mind of every Chinese. Great pressure will eventually build up in China for democratisation. On balance China will probably handle this in a sophisticated way that maintains

stability, but the possibility of a huge discontinuity is there, and a much greater possibility than most analysts acknowledge.

One development which is both a continuity and a discontinuity is that strategic competition will characterise the Sino-India relationship. This has been the pattern on the past. Look at the border war, or the very fact that Pakistan has nuclear weapons as a result of China exercising a strategic option against India, or look at the intense strategic competition between India and China in Myanmar. There will be ideological competition as well. Competition is not the same as conflict. Asia's power structure, with simultaneous exercise of great power status by India, China, Japan and of course the greatest of Asian powers, the United States, will be more complex than ever before.

Australia is well placed to handle all this, perhaps better placed than ever before in its history. We have the closest alliance with the United States of anyone except the United Kingdom, we have a strong economy, we have the most stable democracy in the world, we have powerful defence forces, and good relations with all the Asian giants – India, China, Japan, and Indonesia. The only thing we lack is enough Australians.

Future Navy: Competing Trends in Development – Implications for Australia?

Geoffrey Till

Navies are of interest to analysts partly because they reflect – and to some extent determine the political perspectives of the states whose interests they defend. Accordingly, this paper focuses less on the tactical and operational levels of debate, although both are relevant, than it does on the strategic, because it is at this level that the basic questions about what navies are for can be most easily debated.

At present, there are two 'ideal' but competing models of naval development which reflect both the national security perspectives of states and their current view of globalisation in general, and its impact and consequences on naval forces in particular. I call these two models or paradigms of naval development, 'modern' and 'post-modern'. Neither of these terms are value judgements implying that the one is better or worse than the other. Nor should they be taken as mutually exclusive absolutes. 'Modern' means the adaptation of traditional or conventional concepts of naval employment to contemporary circumstances; post-modern means their transformation into something else in some or all respects. Competing attitudes toward globalisation appear to be one of the main distinguishing characteristics between the two approaches.¹

Model 1: The Post-modern Navy

The post-modern naval model is based on the proposition that it is a new world now – dominated by a new style of globalisation and calling for a new type of naval development. To analysts of this persuasion, the world seems driven not simply by states in their pursuit of the capacity to trade with advantage, but more by companies in search of free markets and individuals insistent on free information and open access. And now they are technologically empowered to get it. Globalisation – the argument goes – is based on an expectation of mutual, though not necessarily equal, benefit to all, and on a set of liberal but universal trading values. These values have resulted in the development of a world society which is thoroughly sea-based and which reduces both the capacity and the incentive for states to take independent action in defence of their interests. It is a borderless world focused on continents, trade routes and capital flows which depends absolutely on a level of sea-based trade that is expected to double or triple over the next 20 years.

All this has an increasingly dramatic effect on the strategic approach of individual countries, whether their leaders approve of the current state of globalisation or not. And indeed countries do vary in their responses to it. Post-modern countries tend to be broadly sympathetic to the development of globalisation; they expect it to be of mutual if not equal benefit to all concerned and hope that it will encourage

peace as well as prosperity. They tend to operate trade-efficient regimes, though they may not be total Western-style democracies necessarily, and they exhibit a market approach and preferences for an open economy. They tend to be outward-looking 'interfering' security exporters, countries that exhibit a tendency to go out and help deal with crises before their effects hit the homeland. And, maybe, they have a 'maritime' character too. The result of all this is a system-centred rather than a nation-centred strategic approach. The country's interests are best defended more through the defence of the system than they are merely through the protection of its territory or its waters, although these are clearly necessary too.

And the system does need defending for however sophisticated it has now become, it has always been vulnerable, especially given the 'just enough just in time' philosophy that moulds the global shipping industry in an era when modern industries plot the passage of containers in quarters of an hour, in a manner which makes even quite minor disruptions expensive to deal with and potentially threatening. Globalisation is not entirely new, nor has it always been secure. Mahan indeed warned us of its 'sensitiveness' or vulnerability over a century ago. But the events of 11 September 2001 suggest that today's threats are especially serious because of the emergence of new types of threat from groups newly empowered to make them. The target was uniquely significant – the World Trade Center. Our enemies that day – and others – are not arguing for a bigger slice of the cake; they want to destroy the bakery – the system, in other words.

Moreover, deliberate attack on, or a lack of support for the sea-based trading system, are but two of the threats it faces. Others include maritime (and often globalised) crime, resource degradation, environmental deterioration and inadvertent damage caused by conflicts ashore. An important element in all these threats is the sheer unpredictability of future events. Iran in 1979 is a good example of a combination of events which were not expected and perhaps could not have been predicted. The Iranian revolution did not make sense in conventional Western terms. In the mid-1970s Iran was oil-rich, with more doctors per head in the population, more hospitals, more tarmac roads, better water supplies than anywhere else in the Middle East. And yet it was here that a mediaeval backlash erupted in the form of the regime of the ayatollahs. These were people who just did not sign up for the values of a world system that was producing all these apparent benefits. Defence planners, therefore, have to cope with the possibility of short-notice strategic surprise.

The declared enemies of the global system may be a tiny minority but they are, however, half-supported by masses of people who do want a bigger slice of the cake, and who might be detached from this level of support by development of a more equitable trading system. Hence the need for wider conceptions of security, and for significant ideological, social and economic strands to the defence of the system. Hence also the indivisibility of national and international security and the death of distance as a defining concept of strategy despite its continued relevance at the tactical and operational levels.

Many of these issues were summarised in Singapore's Defence White Paper of 2000 in words that can hardly be bettered:

The Asian economic crisis has demonstrated how closely intertwined the interests of nations have become in a borderless world. A small and open country like Singapore is especially susceptible to unpredictable shifts in the international environment. This vulnerability will increase as we become more integrated with the global economy. What happens in another part of the world can have immediate and great spill-over effects on our economy and security. But we cannot turn back from globalization. We depend on the world economy for a living. We will have to work more actively with others to safeguard peace and stability in the region and beyond, to promote a peaceful environment conducive to socio-economic development.³

This range of known – and unknown – threats requires navies, and the need to act together in common defence of the common benefits of the global system. Hence, the emergence of a post-modern model of naval development. With his related description of 'a community of interests and righteous ideals', Mahan has again gone before us.⁴ Navies are seen as protecting trade, and, importantly, the conditions for trade, by what they do at and from the sea. Navies of this sort of have an internationalist, collaborative and almost collective world outlook. They see their role as defending the system, directly at sea and indirectly from the sea. Daniel Coulter has concluded

Maintaining the security of globalization, therefore, is a role from which navies dare not shrink. It is the raison d'etre for navies, and navies that understand that first, the ones that come up with the most coherent, credible and imaginative strategy for pursuing it, are the navies that will justify their existence and be firmly in tune with their master, the public.⁵

Their capacity to do so however, is seen to depend on four necessary naval capacities or roles.

MAINTAINING SEA CONTROL

For post-modern navies, the focus in sea control is on the littoral rather than the open oceans. The US Navy is now the biggest coastal navy in the world – only it operates off other peoples' coasts. Here it, and its allies, face a different kind of asymmetric threat and respond accordingly in sizing and shaping their fleets. For all its difficulties, the emergence of the Littoral Combat Ship program in response to such events as the attack on the USS *Cole* illustrates something of a global trend. Sea control now requires a focus on force protection and 'battlespace dominance' in the littoral, where conditions are different than they are on the open ocean and

where land-based threats are more apparent. For many navies, this is a major shift from the old perspectives of the Cold War.

But there is more to it than this. When he was still the Chief of Naval Operations, Admiral Mullen made the point that:

Where the old maritime strategy focused on sea control, the new one must recognise that the economic tide of all nations rises not when the seas are controlled by one but rather when they are made safe and free for all.⁶

This is sea *controle* French style, something more akin to supervision than dominance. This spirit of the common defence of all legitimate forms of the use of the sea permeates the new cooperative strategy of the United States that was unveiled at the Naval War College in Newport in October 2007.⁷

2. MARITIME SECURITY: MAINTAINING GOOD ORDER AT SEA

Good order is threatened by everything from international crime (terrorism, piracy, drugs, arms and people smuggling) to direct attack and environmental crisis. Maintaining good order at sea must involve increasing awareness of this important issue, creating a robust overall policy at all levels and its coherent execution by navies and other maritime agencies. In this regard, seeing the emergence around the world of the concept of Maritime Security in naval publications in recent years is noteworthy. Again the recent emphasis given to humanitarian assistance and disaster relief (HA/DR) in both the US Navy's new strategy and the Indian Navy's *Freedom to use the Seas: India's Maritime Military Strategy* commands attention.⁸

While a particular navy's immediate focus may be on the 'home game' in its own waters and areas of responsibility, globalisation means there is an important 'away game' to win as well. For navies of the post-modern collaborative sort, Maritime Security operations call for naval forces capable of constabulary and low-intensity activity. They will need to cooperate fully with each other, and with coastguards, to be effective.

There are differing ways of accomplishing this, reflecting different geographical situations, levels of threat, constitutional approach, history and so forth. No single, right answer exists. But one common feature to most moderately successful responses is that this must be a maritime, rather than a strictly 'naval', approach; hence the emphasis given in the United States particularly, to the maritime team of Navy, Marines and Coast Guard acting together. Even in constabulary situations, high-intensity naval weapon systems and sensors of the sort appropriate for conventional conflict may often prove of considerable value in difficult good order situations. But, as we shall see later on, choices may have to be made between types of naval capability and between numbers and quality.

3. THE EXPEDITIONARY IMPULSE

Of course, it is the land that is the source of most maritime disorder, a point that Corbett was for ever making. The security problems in the waters around Indonesia in recent years, for example, have been largely a problem of the lack of governance ashore. At sea, therefore, navies are usually dealing with the symptoms of the problem, more than its causes. To help deal with those causes, navies need to be able to project power ashore, and here they may be at their most strategically effective. Here, also, they are defending the system indirectly by what they do from the sea rather than at sea. They are defending the conditions for trade rather than trade itself. Because it is the area where most people live, most industries can be found and through which most trade is conducted, the littoral is where the threats are located and so becomes the natural arena for maritime power projection.

Expeditionary operations, at least as now understood, are inherently different from conventional amphibious operations in that they do not necessarily involve beach assault, they tend to be highly politicised, they are at least intended to be of relatively short duration, they are conducted far from home, they are not seen as a precursor to a conventional war and traditional military activities may play a relatively small part in the overall campaign of which they are a part. While, ultimately, events do have to be decided on the ground, naval forces, at the strategic, operational and tactical levels of conflict, enable this to happen through a variety of crucial contributions to joint and combined expeditionary task forces. These naval contributions rest on the capacity to manoeuvre from the sea and they include the transportation of forces, their supply and sustainment, their support with different kinds of offensive airpower and their protection against all forms of air attack. The expeditionary impulse is an essentially post-modern adaptation of an ancient maritime or amphibious style of war that is best not confused with the original.

This means emphasising the advantages of sea-basing, as a means of supporting forces ashore – a phenomenon as evident in Europe as it is in the United States. The consequent shift towards the creation of tailored Joint and Combined Expeditionary Task Forces of course has major implications for naval force development, because amphibious warfare ships and aircraft carriers tend to be large and expensive and so for that matter do the most sophisticated support ships these operations require. Sometimes such capabilities may seem to come at the price of the numbers of escorts that the force also requires.

Some of the main maritime players in the Asia-Pacific region share in this expeditionary impulse. For example, profoundly maritime and in the face of some unique political constraints, the Japanese seem increasingly willing to make a bigger contribution to the defence of a global system in which they are major players. They have involved themselves in collective system defence operations in the Indian Ocean; the expeditionary quality of their fleet is steadily expanding as is the range of their operations, which have included things as varied as the tsunami relief operation and the shipping of humanitarian aid to Turkish earthquake victims. The Indian Navy is pursuing a similar course. For the US Navy too, the priority

attached to the capacity to conduct expeditionary operations has been manifest in its doctrinal formulations, its program acquisitions and its operations since the end of the Cold War.

Although in most doctrinal formulations maritime power projection is carefully distinguished from the diplomatic functions of navies, in truth the two merge. The perceived capacity to project power ashore may deter adversaries from unwelcome actions and/or compel them into welcome ones; in many ways, moreover, it may reassure allies and bystanders. It either sets the preconditions for more high-intensity or kinetic forms of intervention ashore, or hopefully makes them unnecessary. The capacity to project power ashore, in other words, is a major if often forgotten contribution to the resolution of conflicts on land. The same can be said for the friendlier aspects of naval diplomacy aimed at reassuring allies. This is, accordingly, an increasing part of contemporary maritime strategy, and leads naturally on to:

4. MAINTAINING THE MARITIME CONSENSUS

If Maritime Security as already discussed is the home game, a global maritime consensus appears to be a precondition for the distant water variant – the away game. The ongoing debate about the Global Maritime Partnership that is such a feature of the new US maritime strategy is now focusing on what it means and how such a maritime consensus might best be delivered. The aim is to consolidate and empower a global maritime community of major and minor stakeholders in the system who are pledged to defend it against all manner of threats. A sense of naval togetherness is an important precondition for this; sustaining it through mutual cooperation, combined exercises, staff exchanges and port visits therefore becomes increasingly important to the achievement of higher levels of both political agreement about objectives and the professional capacity to carry them out collectively.

CONTRIBUTORY FLEETS

Recent drastic changes in Scandinavia's navies are interesting not just for a radical change of role from coastal defence to expeditionary missions but also because they so clearly exemplify a contributory strategy – the acceptance, in other words, that resource limitations mean no single nation can solve its security problems on its own, and that a collective maritime effort is required, with all the loss of operational and political independence in the conduct of the campaign that that implies. While no naval leader is likely willingly to espouse the concept of producing a deliberately 'unbalanced fleet' the post-modernist approach will nonetheless tend rather more to an acceptance of the budgetary and operational realities of required specialisation. Because it is so heavily influenced by resource constraints, this post-modern characteristic will tend to be particularly evident in the case of smaller navies. Here the policy issue will tend to be the calculation as to whether contributing a standalone force that can be integrated as such within a larger coalition organisation on

the one hand, or a collection of niche capabilities which may not make much sense when considered as a command on the other is more effective militarily and/or politically.

AN OPEN DEFENCE MARKET

The same kind of perhaps resigned realism may reinforce market-driven preferences for *laissez-faire* attitudes towards the maintenance of a domestic industrial base. This approach may well be characterised by a relaxed naval or governmental attitude to the foreign supply of naval equipment and/or to the acquisition of domestic industry by foreign concerns. Post-modern navies may get what they need more quickly and more cheaply from foreign suppliers than they could by relying on domestic industry; they may not be particularly bothered by the theoretical strategic vulnerabilities this reliance on an open defence market may open up now or in the future.

BUT IS GLOBALISATION JUST AN INTERLUDE?

The post-modern approach described so far clearly assumes both that globalisation will continue and that there is a strong sense of international community which in the future can be expressed and acted upon in maritime ways. Many would argue that these may prove dangerous assumptions. We have had periods of globalisation before. The Mongol empire can be seen as one such example, the British formal and informal empires of the late 19th century another. But these previous systems collapsed through a combination of commercial rivalries, mistaken policies, the discontents of the disadvantaged, growing nationalism and in the Mongol's case, global pandemics. Globalisation may be frailer systematically than we think and so more vulnerable to the states and groups that are either opposed to it conceptually, or see it simply as something to exploit ruthlessly.

For instance, some argue that our optimism about globalisation's future depends on assumptions about sufficient resources. These analysts argue further that this is proving an illusion, most obviously in the availability of oil. A steep rise in oil demand, especially from China, Japan and the rest of the Asia-Pacific, is coinciding with a terminal fall in the discovery of new reserves. Predicting that they will soon need to start scraping the bottom of the barrel, states are already manoeuvring to cope with a less secure energy future, and even now that is exacerbating relations. Take China and Japan. They are in dispute over islands which straddle potentially important marine oil fields. They are both competing for stocks in the volatile Middle East. The Chinese are heavily engaged with regimes that the United States regards as dangerous and disreputable (Sudan, Venezuela, Zimbabwe and Iran). Conscious of their dependence on oil supplies from the Arabian Gulf, the Chinese are moving into the Indian Ocean, watched warily by India. Moreover today's globalisation faces threats that previous versions did not, such as international terrorism and the prospects of catastrophic climate change.

For all these reasons, there are still strong modern Westphalian tendencies in the way states behave and in its consequent impact on the system. Given the difficulty of predicting future events and reflecting the possibility that globalisation may not march ever onwards, nations, the argument goes, had better prepare for a bleaker, more individual future as well. As Thomas Friedman points out, war could 'unflatten' the world. Accordingly, despite the onset of globalisation, states and the national perspective still continue. Indeed, attitudes towards globalisation and its maritime requirements may often reflect the kind of 'national' perspectives that actually help determine the character and the limits just as they arguably did in the past. Such attitudes in turn, will help determine the size, shape and role of the fleet and suggest that a modern rather than collaborative/post-modern model of naval still has decided relevance.

Model 2: The Modern Navy

This consequential second model of naval development reflects the Westphalian state system, with its assumptions of unending competition between states for power influence, land and resources, ideological supremacy and its preoccupations with military power. Basically, naval development here conforms to the idea that international politics is about who gets what, when, and how - and that the provision of security is the fundamental justification for the state. The characteristics of this national approach include an assumption that sea power brings influence to bear on the behaviour of other states. The preoccupation is, therefore, peer competition - when navies view each other as the benchmark for naval development. Naval development in one country is based upon, and possibly aimed against, the naval development of others. It is a case of 'like against like' and broadly symmetrical conflict. The main indicator of this is the preparation for decisive battle. Alfred Thayer Mahan is, perhaps unfairly, regarded as the apostle of this approach. Mahan's emphasis on the importance and military character of sea power was widely accepted. This thinking dominated naval development through the 20th century, with its preoccupations with the first and second world wars and the Cold War. Navies of this sort clearly reflect rather different assumptions about the state of the world we live in, and will live in.

Nowadays, as before, this more traditional approach is characterised by a rather different set of naval preoccupations.

1. SEA CONTROL

Here the emphasis tends to be more on sea control and peer competition of the Mahanian sort that dominated naval events through the 20th century. This approach calls for platforms optimised for high-intensity 'fleet vs fleet' engagements, as Soviet Admiral Gorshkov used to call them. They are expensive and probably optimised for open ocean operations rather than land attack. Weaponry and sensor mixes emphasise anti-submarine warfare (ASW), anti-air warfare (AAW), anti-ship

missiles, etc - capacities that until recently, we could not expect non-state forces of disorder to possess or use. A continuing interest in defensive mining is another characteristic of this approach.¹³ Such preferences are certainly evident in US naval thinking, despite the issue of its new cooperative maritime strategy. Inspired by the need to hedge against a possible future rivalry with China, America's leaders continue to stress the need for 'hard' naval power. For instance:

We will not permit conditions under which our maritime forces would be impeded from freedom of maneuver and freedom of access, nor will we permit an adversary to disrupt the global supply chain by attempting to block vital sea-lines of communication and commerce. We will be able to impose local sea control wherever necessary, ideally in concert with friends and allies, but by ourselves if we must.¹⁴

Chinese naval discourse likewise appears to have strong Mahanian overtones and their recent naval construction programs and operations suggest growing reach, growing operational confidence and growing offensive potential. This has also been noted by naval leaders in Japan and India, who, while not identifying China as a future adversary, nonetheless continue to develop sea control ideas and capacities that would be handy were it to become so. 'Sea Control' says Indian Maritime Doctrine quite baldly 'is the central concept around which the Indian Navy is structured'.¹ As for the Chinese themselves, their continued reliance on Russia for sophisticated equipment is a strategic constraint that they would clearly like to reduce. As crucial players in the international global economy, they increasingly acknowledge the need to move away from narrow conceptions of sea denial in order to develop the capacity to protect their interests in more distant places, especially in regard to energy security. The consequent 'string of pearls strategy' if that's what it is, would however clearly be of interest to other countries in the Asia-Pacific region.

2. MARITIME POWER PROJECTION

This range of capabilities may well include attention to the capacity to project power ashore, in the form of amphibious assault, naval gunfire support and long-range missile attack which while perhaps part of the armoury for post-modern expeditionary operations nonetheless are decidedly salient to conventional concepts of maritime warfare. At their most extreme, modern navies of this sort may well exhibit a determination to maintain a sea-based national nuclear deterrent and possibly means of defending their countries against such an attack. This is certainly characteristic of the navies of the United States, China, and India; Japan's interest in a sea-based ballistic missile defence system likewise suggest moves in the same direction.

3. MORE EXCLUSIVE GOOD ORDER AT SEA

'Modern' navies often regard the sea as a frontier needing to be defended individually and exclusively. They have a strong focus on home waters and a marked disinclination to compromise with neighbours. They exhibit lower levels of effective compliance with international maritime conventions, and limited involvement in multilateral enforcement arrangements. These navies remain suspicious of anything that threatens to subvert sovereignty, or to compromise national traditions, cultures and standard operating procedures, in short, the sort of thing that in the past has complicated anti-piracy policies in the Malacca Strait. At its most basic such attitudes may be exemplified by reluctance or indeed an inability, to share information of the sort required to make complete maritime domain awareness a reality. With its persistent concerns about the intrusion of vessels from neighbouring countries into waters that it regards as its sovereign waters and its evident determination to go its own way in its whaling policies, Japan provides other examples of a modernist approach to the maintenance of good order at sea.

4. SOVEREIGNTY IN COALITION

Modern navies need allies just as much as post-modern ones do, but even in alliance, they are more concerned to preserve a potential for independence of action in pursuit of purely national aims. Their response to post-modernist aspirations for a Global Maritime Partnership may well be characterised by a limited willingness to compromise over aims and methods. As a rule, exercises with modern navies will tend to be limited in scope and ambition for that reason.

In order to make such policies and approaches possible, modern navies will have rather different attitudes to the two 'enablers' previously noted.

5. A BALANCED FLEET

Preferring not to reduce their capacity for independent action in an unknowable future, modern navies will try to maintain as wide a set of independent all-round capabilities as their resources will allow in order to keep their options open. They will not be content simply to develop niche specialisations in the expectation that someone else will fill the consequent gaps. Maintaining a balanced fleet would certainly seem to be the aspiration in the United States – and India is currently engaged in one of the most impressive across the board fleet-renewal programs to be seen anywhere. Given continuing uncertainties about the construction aspirations of China and Japan, the situation in those two countries is less clear.

6. A DEFENCE INDUSTRIAL BASE

The same thinking is used to justify a national defence industrial base, although there are likely to be other domestic social and political reasons for such a policy as well. This explains the attractions of economic self-reliance which lead countries as varied as Iran and India into developing indigenous industrial capabilities, even though this may be more expensive in the short term and is likely to make technological and political cooperation with others more difficult. Because of its substantial concerns about future rivals in the Asia-Pacific region and its political requirement to reduce operational risk, the United States engages in the unilateral pursuit of technological excellence in ways which make it difficult for even their closest allies to keep up with them. Moreover, for all its faith in globalisation and an open defence market, the US Congress, partly for very domestic reasons, puts a great deal of emphasis on the maintenance of secure industrial capacities at home. India, acutely aware of the strategic disadvantage of excessive reliance on US arms supply in the past, and of the costs and delays apparently involved in reliance on the Russians now, is clearly diversifying its sources of foreign supply and determinedly building up its domestic industrial base.

Conclusion: Particular Blends

These two competing visions of the world's future are admittedly crudely drawn, and so are the maritime behaviours and capabilities they call for. Nor do such visions necessarily imply roles and capacities that are mutually exclusive alternatives. Indeed, such naval capacities as amphibious warfare ships and shipborne helicopters can be as valuable for humanitarian relief operations as they are for kinetic types of maritime power projection. Accordingly, and this will have been apparent from the illustrative examples given above, most navies exhibit a blend of both approaches, and so tend to situate themselves in a spectrum of possibility between modern at one end of the scale and post-modern at the other.

So, how might we determine a navy's position on this spectrum? Clearly this will involve an assessment of the country's general policy characteristics, including its attitudes towards globalisation, and its security assumptions. The nature of the fleet would need to be analysed through a look at its doctrinal and other policy declarations (at what they say) at the structure and nature of the fleet (at what they have got) and at the nature of their operations (at what they do). Finally, policies towards the country's defence industrial base may well be indicative of a particular navy's place on the spectrum.

The Swedish navy, for example, might be considered as being very much towards the post-modern end of the scale. Since the end of the Cold War it has transformed itself utterly from a totally self-reliant, determinedly non-aligned force exclusively concerned with the defence of its own waters, to a navy whose coastal expertise is of decided value in the conduct of coalition expeditionary operations. Swedish defence policy now envisages participation in properly mandated expeditions overseas, and appears content with the acquisition of key industrial capacities such as the submarine builder Kockums by foreign concerns. China, the United States, Japan and India likewise clearly all have post-modernist tendencies to some degree but would appear well to the right of Sweden on our graph. The post-modernist impulse

may at the moment be slowly gaining ground even in the Asia-Pacific region but nowhere near as fast as it appears to be doing in Europe.

Trying to plot navies on such a spectrum might not come up with anything very startling in terms of answers, but at least the process of enquiry should be heuristically useful in flushing out all sorts of questions and possible conclusions about future naval development, the emerging security architecture of the Asia-Pacific region, and the choices that naval planners may have to make. The journey, in other words, might be more important than the arrival!

But where might Australia fit into this spectrum of response? What might an investigation of its position tell us about the country's strategic future and the issues and choices confronting it? What might be its assumptions and strategic choices, especially now, as a new Government prepares for a new Defence White Paper?

Whither Australia? – Some General Policy Characteristics

Some aspects of Australia's security situation are not matters of choice, and the most obvious part of this is the country's strategic setting. Not surprisingly naval policy declarations such as successive Plans Blue and *Australian Maritime Doctrine* seek to hammer home the point that Australia is a profoundly maritime country in a profoundly maritime and dynamic region. This is true at two levels. Firstly, as the world's biggest island Australia depends on the sea for the transport of its goods everywhere else. Its economy is critically related to, and dependent on, the rest of the world economy, particularly its increasingly important Asia-Pacific sector. But the country also has deep, historic, cultural links with Britain, with Europe and increasingly with those parts of the region from which some of its newer citizens have come. In every sense, then, Australia is part of the world system, and so likely to be significantly affected by events in possibly distant places.

Secondly, Australia's own maritime resources and therefore responsibilities are considerable. Its exclusive economic zone is of great economic value, the oil and gas industry on its own worth \$8 billion pa, its commercial fishing industry the 5th largest primary industry, the seafood sector alone employing 90,000 people. Most of Australia's catch is exported and so becomes a valuable source of international capital. Geographically of course it covers a huge area, some 16 million km², almost 10 per cent of the world's total surface area.

Curiously though, Australia shares an inclination towards what has been called 'sea-blindness' in other maritime countries, something which is clearly a matter for lament.¹⁷ While generally merely frustrating for mariners, this tendency could become strategically dangerous if, in combination with other events, it were to skew the national outlook and priorities.

SECURITY POLICY

For Australia, a quintessentially 'medium power,' strategic choices are indeed likely to be both particularly difficult and so particularly illustrative of what Australians

think their country is and want it to be. 18 This is because, as a medium power, the balance between resources and commitments is especially hard for Australia to strike. The problem is further aggravated by the fact, as we have seen, that globalisation is adding new dimensions to the military task without necessarily taking out the old ones. A perception of the resources available when set against the scale and strategic importance of the possible commitment will clearly also influence where Australia finds it should strike the balance between modernist self-reliance and national autonomy on the one hand and post-modernist cooperation/alliance with others on the other. For Australia, however, this is not a new problem.

The RAN has always been important as an expression of independent nation hood and from its inception under Captain (later Vice Admiral Sir) William Rooke Creswell, has always felt it needed to develop certain independent capabilities lest its main ally prove unreliable. For all that, it has always also a strong contributory task force approach in its security policy strategy, first to the Empire and the Commonwealth and more recently to a variety of US-led coalitions.¹⁹ The debate here might be, first, whether this tradition should be amended and, second, about which contributory posture wins most influence over allies - deep integration with allied forces through the provision of a number of niche capabilities that are not in themselves a coherent command (such as mine clearance capabilities together with special forces) or a semi-autonomous task force of some sort. Warships, of course, can be either. Finally there is the issue of whether Australia contributes to the short sharp main coalition effort or the long reconstruction/disengagement period afterwards.

Another non-negotiable aspect of Australia's setting, and one that is more immediately strategic in nature is its geography. It is a country in the Asia-Pacific region with a comparatively small population of 21 million people, but comparatively high levels of wealth situated just south of an arc of instability that stretches from Indonesia, East Timor to the South Pacific Island states.

A number of overlapping modern/post-modern issues would seem immediately to arise from this. The first of these is where defence effort should be focused. Should it be on Australia's northern approaches, on its near abroad or further still - on all three? One option could still be a focus on continental defence, on protecting the continent against incoming adversaries in the northern approaches. *Defence 2000*: Our Future Defence Force says this calls for the interception of hostile forces before they are in a position to attack Australia directly. It represents the forward defence of the 'inner arc' of a sort that has, historically, tended to be helpful for RAN and air force appropriations. Since this seems largely to envisage conventional forces defending their nation in the traditional way against the forces of other hostile nations, this might be a considered a typically 'modern' approach.

The post-modern alternative, also evident to a degree in Defence 2000: Our Future Defence Force is to look somewhat further out, towards operations in the near abroad and beyond. One variant of this is to concentrate on the need for stability 'in our region'. 'We cannot afford' said Brendan Nelson, when Minister for Defence, 'to have states in our region become havens for transnational crime or terrorism'. This

approach assumes Australia's adopting a typically post-modern security exporter role in its immediate area particularly in recent times East Timor and the Solomon Islands.

But Nelson also referred to 'Our broader region' – Southeast Asia and the wider Asia-Pacific region as dynamic, growing in strategic significance, comprising 20 countries with 3.5 billion people, absorbing 40 per cent of global arms deliveries and eight of the world's 10 largest armies.²⁰ Further afield still, he argued, 'What happens in the Middle East and more remote parts of the world is no less important to our security and interests than what happens on our borders.'²¹ In so far as this represents a concern for the stability of the world system, and a prospective sense that Australia should be contributing to that wider security, this would seem much more post-modern. In this conception Australia's northern seas become a highway for more distant expeditionary operations rather than a defensive moat.

Furthermore, in so far as it envisages operations on land (as for example in Iraq) this, in the Australian circumstances at least, has tended in recent times to be more helpful for the Army because it becomes the primary supported, rather than supporting element in the campaign. After a long period of benign neglect, it is perhaps unsurprising that this renaissance should have led to something of an overreaction in some cases, such as a former Land Commander's 2001 claim that recent experience showed 'that land forces, as defined by the White Paper and which included certain naval and air elements, represent almost the entire requirement for such operations'.²²

Instead the accent has to be on a thoroughly joint approach, that can be tailored for each specific and, unfortunately, probably unique set of circumstances as, or preferably before, they arise. Following this post-modernist line, all three Services might need to abandon or at least downplay some of their more orthodox military thinking in favour of a more flexible approach. 'That will require,' said Air Chief Marshal Angus Houston in May 2007, 'a measured and orderly transition from a force heavily weighted to countering a conventional threat against Australian territory to a more adaptable and agile force.' Furthermore, the prospect of threats from potential adversaries developing faster than Australia's capacity to counter them, increases the immediate priority for high grade intelligence and surveillance capacities and proactive preparation, not least through naval presence.

This issue shades into the second question of *what* the military should be doing rather than on *where* they should be doing it. Modernists focus on the possible threats posed by other countries, in the future if not now. The alternate revisionist and postmodern notion expressed in *A Defence Update 2003* that there is a reduction in major power tensions and much less near-term need to defend Australia directly. Although it includes coalitional expeditionary operations the paper concentrates on operations other than conventional war and on lower order threats to Australia's security. Here there will be a strong emphasis on trade, development assistance and oceans management as instruments of regional security. Sea power can make significant contributions to this broader concept of security, not least because there

is a maritime dimension to much of it. Plan Blue 2006 assumes that Australia aims to promote stability in the wider Asia-Pacific region, thereby securing the country's more distant, less direct interests and argues for a more maritime - in the Corbettian sense, more joint, more combined approach, that is aimed at the delivery of a wider, comprehensive range of effects.

There may be a third question in the debate as well - and that is the temporal issue of the balance to be struck between supporting immediate and near-term requirements (which are largely post-modern) rather than possible longer term ones in a future and uncertain world (which in the Asia-Pacific, region given its galaxy of rising and potentially competitive powers, might well be modern). This, then, is the question of when defence effort should be focused. It is the classic dilemma in prioritising between one kind of threat now and a different, possible one tomorrow for which early preparations should begin today. The tyranny, not of distance, but of the immediate and pressing commitment - particularly those resulting from current operations in Iraq and Afghanistan - have certainly circumscribed naval spending in Britain, other parts of Europe and the United States, unhelpfully reviving inter-Service tensions.

These choices do not of course simply translate into a modern/post-modern juxtaposition of course. Such is the flexibility of sea power, Australia could adopt a forward expeditionary posture for modern reasons rather than post-modern ones, such as the defence of Australian citizens abroad or as part of its historic bid to secure future protection from its main ally by supporting its policies now.

DOCTRINE

Recent Australian doctrinal formulations identify many of these modern/postmodern issues juxtaposition. Plan Blue 2006, for instance, starts with a review of both post-modern insecurity and state-based traditional security challenges especially in the Asia-Pacific region - and the impact of globalisation on both. There is explicit mention of the need to deal with non-traditional adversaries as well as traditional ones and of the requirement for those post-modern responses to be interagency.²⁴ There is emphasis on the need for interoperability with the United States and to a lesser extent with other regional navies.

The primary emphasis on the traditional war-fighting element remains strong in Australian Maritime Doctrine, however, with an emphasis on the maintenance of sovereignty.²⁵ It has references to symmetrical operations especially in Australia's maritime approaches, and to the possible emergence of other major naval players in the Asia-Pacific region. There is reference to the need for coalition with others, especially the United States, but exercises are justified more by the consequent improvement of inter-operability rather than as a strategic exercise in coalitionbuilding.²⁶ Australian Maritime Doctrine specifically identities the need to operate 'well outside the Asia Pacific Region' because of the need to maintain free conditions for trade.²⁷ It is a matter of degree of course but all this comes over as illustrative

of a rather more modern approach. Moreover, the *Defence 2000: Our Future Defence Force*, in its discussion of the RAN's sea control requirements also struck a distinctly conventional note. 'The key to defending Australia', it says 'is to control the air and sea approaches to our continent, so as to deny them to hostile ships and aircraft, and provide maximum freedom of action for our forces. That means we need a fundamentally maritime strategy.' Since that time, there has been a discernible shift away from sea denial operations in Australia's northern waters and towards more expansive conventional concepts of sea control and the acquisition of the AAW, ASW and electronic warfare capabilities that go with it.²⁸

Nonetheless, both *Plan Blue 2006* and *Australian Maritime Doctrine* acknowledge the need to cover as much of the range of possibilities as possible. *Australian Maritime Doctrine* does not envisage a choice between the modern and post-modern preoccupations and commitments since, it says, both have to be done - requiring capabilities across the spectrum of conflict.²⁹

Taking refuge in the notion that conventional war fighting skills and capabilities can also deal with post-modern commitments as a kind of cost-free bonus may sometimes seem a somewhat disingenuous solution to the problem – an evasion of the perceived need to choose between the two approaches. After all, post-modern circumstances may imply changed balances between military and non-military investments; moreover, while a modern air warfare destroyer may be able to perform a drugs enforcement operation, tasking it to do so as a standard routine would probably be cost-ineffective.³⁰ The new US maritime strategy, by contrast, is quite frank that choices do have to be made between the modern and post-modern approaches:

There is a tension, however, between the requirements for continued peacetime engagement and maintaining proficiency in the critical skills necessary to fighting and winning in combat.

By acknowledging this tension and the inference that the range of requirements is such that neither the US Navy, nor the other two maritime Services, nor indeed the United States itself can 'go it alone', the US strategy appears to find the answer in 'an unprecedented level of integration among our maritime forces and enhanced cooperation with the other instruments of national power, as well as the capabilities of our international partners.'31 American critics of the new strategy have argued, even so, that the key indicator of their navy's modern/post-modern priorities in fact will be the actual balance struck between the modern and post-modern approaches in current and future fleet construction, and this is not as yet at all clear.

FLEET SIZE AND SHAPE

It is here indeed that the acquisition dilemmas of Australia as a medium power are most likely to come into play, since tight budgets discipline the allocation of resources to commitments. With its *Adelaide* and *Anzac* class frigate upgrades, the conclusion of the *Armidale* class patrol boat program, its *Hobart* class air warfare

destroyer (AWD) and Canberra class amphibious ship (LHD) programs, and still more its developing interest in a Collins class submarine follow-up project, the RAN is clearly engaged in a major and impressive re-capitalisation project, designed to recover quality after a period of comparative neglect. 'High intensity operations,' the RAN seems generally to believe, 'must remain the basic force determinant' in this process.³²

A great deal of this sounds very modern and conventional, especially given the constant references to the need to respond to the developing naval capabilities of other (usually unnamed) countries in the region, and to the continuing need to assure control over Australia's northern approaches and assert it in the waters beyond. The new heavy-weight torpedoes of the Collins submarines, for example, would be very effective against enemy surface ships and submarines, but of limited use against anything else. The AWD program, moreover, is clearly based on the perceived need to develop a sophisticated layered air defence system for the fleet from aircraft and missile attack, while the recovering interest in ASW, inspired perhaps by having to grapple with Indonesian Type 209 submarines during the East Timor crisis, are seen as necessary in order to fulfil the 2000 Defence White Paper aim of being able to 'impose substantial constraints on hostile submarine operations in its maritime approaches,' and elsewhere.³³

Of course there are budgetary limits: the RAN would probably have preferred the Gibbs & Cox tender for the AWD to the smaller vessels of the Navantia offer because of the former's greater quality growth potential, and the Anzac and Adelaide class frigate upgrades were less than originally hoped for, but they nonetheless strongly suggest continuing preoccupations with the RAN's need to deal with high quality conventional rather than asymmetric non-traditional threats. The same national preoccupations could also be read into the Armidale program since some have argued that these are somewhat smaller than they should be (55m rather than 65m) and so may be more suitable for Australia's own waters than further waters in the South Pacific; moreover, the unusual acquisition task based, time-on-station approach in the Armidale acquisition program may limit their capacity for still more ambitious use.34

This impression of residual modernism may be heightened by previously expressed interest in the development of a Tactical Land Attack Missile capability on the one hand,35 and on the other suggestions that the RAN retains the option to move on from the re-establishment of a capacity for fleet air defence lost with the de-commissioning of HMAS Brisbane in 2001, to the eventual development of a ballistic missile defence capability as the former Prime Minister, John Howard had apparently suggested. These solutions all cost money which could otherwise have been spent on more obviously post-modern priorities, and, moreover, imply a determination not always to have to rely on US, or other allied capabilities in these

Such is the flexibility of naval power that of course there are arguments the other way too! The combat systems in the Collins submarines, in the Anzac and *Adelaide* frigate upgrades and those envisaged for the AWD would all facilitate high levels of interoperability with the US Navy.³⁶

These capabilities would also certainly be extremely useful in more distant coalition expeditionary operations 'in defence of the system' and it is noteworthy, in this respect, that the LHD decision has been to select the larger and potentially more powerful of the various tenders on offer, the Navantia design was accepted, two 27,000 ton ships capable of delivering 1,000 personnel and 23 Abrams M1A1 tanks and 6 landing spots for the MRH90 helicopters also on order.³⁷ This together with Australia's earlier acquisition of C-17 aircraft confirms the country's intention to construct a 'global defence force.' Robert McCallum, the US ambassador at the handing-over ceremony summarises the point like this:

Acquiring such heavy-lift capability places Australia into a small group of countries that can rapidly and reliably bring substantial resources to bear in response to military threats, armed conflicts, internal unrest, or humanitarian crises.³⁸

To conclude, Australia's existing fleet renewal program does suggest an intention to recapitalise the traditional high-end capabilities associated with the conventional modern approach, and such is the state of the program, that there remain limited opportunities for the switch in emphasis that post-modernists might prefer.

MISSIONS

Perhaps unsurprisingly, the recent and current range of activity of the RAN is broadly in line with its acquisition strategy – but with one major and notable, if entirely understandable, exception. In peacetime, or at least in times of reduced tension, low-end, operations which are not, in the main, aimed against conventional adversaries tend to rise. Thus we find that of the 376 operations of the RAN between 1990 and 2005 no less than 232 (62 per cent) were described as 'constabulary' and a further 139 (36 per cent) were 'diplomatic'.³⁹ These figures may be quibbled over by those who would argue, for example that a navy's successful diplomatic forays often depend on the target audience's perception of its high-end capacity. But at the very least they, and the levels of operational tempo they suggest, should dispose of the curious illusion (shared perhaps by some naval officers) that 'post-modern' somehow means less, or even largely non-naval activity.

Moreover, actual operations are not the sum of a navy's activity; routine fleet exercises, bilateral and multi-lateral exercises, are often based on the preparation and practice of high-level capabilities. For instance ASWEX-06 off Perth in November 2006 rehearsed anti-submarine capabilities, partly in recognition of the growth in the number of diesel submarines in the Asia-Pacific region, but it also provided an opportunity to cement relations with New Zealand whose ships and aircraft also took part.⁴⁰

A closer examination of the RAN's performance in its multifarious 'good order' tasks suggests a need for caution against over-simple classification. Australia has a vast coastline and is thus quite vulnerable to maritime crime; there are strong 'modern' and exclusive overtones to the task of keeping unwanted people and drugs out of Australia - of barrier operations, in effect.⁴¹ Given the size and variety of Australia's jurisdiction, this is an ambitious undertaking and there is a legitimate doubt as to whether 14 Armidale patrol boats are sufficient for the task.⁴² As we have seen, some would argue, a little dangerously perhaps, that since this is a task which can also be done by conventional high end units it helps justify them. This argument is, moreover, strengthened by evidence of the intimate connections of the home and away aspects of maritime security that is indicated by such things as the arrest of the government-linked North Korean drug smuggling ship, the *Pong* Su captured by HMAS Stuart off New South Wales on the one hand, and Australia's Pacific Patrol Boat Project and intermittent involvement in the Solomon Islands on the other.⁴³ High-end capabilities tend to come into their own the more 'away' such activities become.

Similarly, the utility of high-end conventional capabilities have been repeatedly demonstrated by the RAN and others in the Arabian Gulf. The central role of HMA Ships Anzac and Kanimbla in the bombardment of the Al Faw peninsula on '5-inch Friday' on 21 March 2003,44 the RAN's continuing and sometimes contested role in the defence of Iraq's all-important oil terminals in the Northern Arabian Gulf and in the constant patrols of Task Forces 150/158 are part of a lengthy and varied contribution to 'system security,' which, given the area's unpredictability and the political dangers of operational loss, call for flexible and capable forces. It was the same story in East Timor where Major General Cosgrove wanted overwhelming force ashore on Day 1 of the operation, followed within a week by the bulk of the force and substantial naval and air combat power in order to deter, and, if that failed, overcome resistance:

Another military blinding glimpse of the obvious is the utility of sea power in the East Timor operation. The persuasive, intimidatory or deterrent nature of major warships was not to me as the combined joint force commander an incidental, nice to have 'add on' but an important indicator of national and international resolve and most reassuring to all of us who relied on sea lifelines. 45

This and subsequent operations have confirmed the need for high grade transport and support capacities to enable the Army and air force ashore, to offer secure command facilities, and a means of extraction or enhanced operational manoeuvre. Further, only in that some solutions are more ambitious than others could anyone looking at the various programs for sea-basing being considered around the world possibly conclude they were either cheap or low-tech aspirations.

The same may be said about the RAN's diplomatic activities over this period where, again, the advantages of high-end capability have been manifest in the

deterrence or compellence of possible adversaries and a powerful means of adding credibility to and extracting influence and policy benefit from coalition operations, especially perhaps when used in a proactive rather than a merely reactive mode.

THE ENABLERS

Enough has been said to indicate the RAN's evident preference for a fleet balanced towards high-end capabilities that suggest a continuing determination for Australia to be able to fight its necessary battles on its own if it has to, and to have significant influence in coalition operations when it does not.

The same may be said about Australia's attitudes towards its own industrial base. Australia, as a medium power, has always had to 'juggle high technology, great expectations, tight funds and low volumes.'46 On the one hand, post-modern preferences for a free global market economy operating organically, without major intervention by the state on the one hand have had to be set against a variety of domestic incentives to support local industry and a residual acceptance of the strategic advantages of a degree of industrial autonomy for an uncertain future on the other.⁴⁷ But there is an alliance aspect to the case to be considered as well. As Senator Robert Hill, then the Defence Minister said of the signing of a statement of principles agreement with the United States:

This statement will serve as the framework within which the respective navies communicate and transfer information, helping to ensure we can better work together through compatible technologies. Our navy's access to the USN provides us with significant opportunities to ensure our fleet can take full advantage of new technology and concepts.⁴⁸

This kind of thing is far removed from the familiar modern determination to build everything at home, come what may.

But to further complicate the matter, there is also a complex temporal dimension woven in to all of this. The RAN, planning in a very post-modern way for a long-term operational future, might well prefer expensive and ambitious projects now because of their growth potential even if they are foreign sourced (such as the Gibbs & Cox AWD solution) whereas the Government planning instead for a long term industrial and strategic future might prefer a steadier approach which focuses on safer, established technologies which offer lower prices now but more opportunities for industrial up-skilling now and later. Arguably, these tensions have been apparent in both the AWD and the LHD programs, when naval priorities have competed with governmental ones that are based on worries about a declining maritime skills base, and on increasing recognition that the state may have to intervene for the defence industrial base to survive let alone prosper.⁴⁹ In this respect, navies might want to be more post-modern than the states they serve.

The notion that countries ought even to entertain the idea of developing a strategy for its defence industrial base goes against purist post-modern expectations and may help explain why some countries such as Australia and the United

Kingdom have been so slow to develop one and the cross government institutions that go with them. Such a strategy would probably seek smoother balances between demand and supply to get away from the unsustainable boom-and bust cycles of the past. It would probably also involve the identification of key capacities that can be sustained in the future and the, possibly unpopular, short-term rationalisations needed now. None of this is easy. Indeed the need to make the RAN and government 'smarter' customers by such a strategy is a common refrain. ⁵⁰ Again such modern/post-modern issues seem likely to influence debate on Australia's emerging defence industrial strategy.

Conclusions

The unsurprising conclusions that seem to leap out of this quick review of Australian naval development is that both the modern and the post-modern perspectives apply, that in some senses they compete and that therefore complicated choices do indeed have to be made. These choices are all matters of degree and the evidence for, and the consequences of, particular decisions are hugely inter-related. But, hopefully, thinking about these difficult issues in a modern/post-modern kind of way will advance rather than retard clarity of thought and conceptual planning, especially when preparing new security policy formulations. At the very least, such an approach should finally lay to rest the *canards* that post-modern activities somehow require less naval effort and, secondly, are synonymous merely with investment in low-end capabilities.

The Future of the Royal Navy and Coalition Operations

Paul Boissier

I propose to speak today about the future of the Royal Navy and Coalition operations, with a few words about why it is that the United Kingdom is interested in the Asia-Pacific region. But by way of introduction, I would like to start by setting out some issues of context that challenge us all.

Today, you can travel around the world in 24 hours; global communications are instantaneous; continuous news reporting of the world's many crises is both rapid and graphically detailed; and people all over the world are more joined-up and connected than ever before. It is, then, a sad reflection on our condition that we still live in a world which is unpredictable and chaotic, and where – despite our unprecedented ability to communicate across national and intellectual boundaries – many of the issues appear to all intents and purposes to be beyond our control.

A little under 20 years ago, when the Berlin Wall was pulled down, we had what was perhaps a naïve expectation that this would somehow make the world a more peaceful place, and that reductions in our armed forces would bring about a peace dividend. But of course this never quite materialised. Look around the world today: the big political blocs are thankfully no longer facing each other down, but conflict and tension remain pervasive, organised on smaller lines of tribal, ethnic or religious division – but still alarmingly deadly, despite their scale. We can see the emergence of numerous regional crises, the reawakening of nationalism and religious fundamentalism. Where we once stayed awake at night worrying about 'mutually assured destruction', we are now confronted with faceless terrorism and the proliferation of weapons of mass destruction, possibly even in the hands of non-state actors.

We see challenges evolving from totalitarian and non-democratic states; we see failing states with all the human misery that poor or corrupt government brings in its wake, and we feel the need, from both selfish and altruistic motives, to try to make things better. Some of these problems are local, some are global. Some are temporary, others are enduring. Some are trivial, and some ultimately affect the world's stability. And the difficulty facing us all is to identify the problems that can and must be resolved, and to gain the multinational consensus that will enable us to bring them to a resolution. As recent campaigns of choice have shown, that consensus is often very difficult to achieve, and the difficulty increases significantly where there is no immediately apparent threat, or where direct military action is involved, or where a commitment arises that must be measured in decades rather than years.

As I speak, the likelihood of a major international war seems low, and the greatest threats to our security and interests are those posed by rogue states, international terrorism and weapons of mass destruction. But unless we have gone through some great tectonic shift in human nature over the last 25 years, it would surely be unrealistic to assume that interstate conflict is a thing of the past. And so it is imperative that we understand and square up to the new context of the 21st century. Quite apart from the purely political pressures that have been with us for centuries, we now have to identify and analyse a number of new trends: how, for instance will our security be affected by the pace of technological change, which reduces the price of sophisticated equipment and weapons, whilst widening their availability?

What will be the effect of climate change, or demographic shifts, or increased competition for resources? How do we deal with population growth on one hand and shrinking populations on the other that lead inevitably towards migration, human trafficking and radically different value sets? There is no room for burying our heads in the sand over these issues: they affect us all. And those of us who work in the maritime environment must understand and embrace them if we are to be effective in making the world a safer place.

But let us just look at the sea for a few moments. The vast majority of the world's population lives within 100 miles of the sea, and the majority of human activity occurs within this coastal belt. It is likely that the next century will see a massive increase in urbanisation of these regions, particularly increasing the development of offshore energy structures and port facilities.

And these urban centres will become increasingly vulnerable to climate change and the effects of extreme weather. I think it is fair to say that science is still unclear over the rate at which we can expect sea levels to rise in the future, and much depends on the resilience of great ice fields such as the Greenland Ice Cap, but there is a strange congruence between the centres of population and the areas most at risk from inundation. Indeed, 630 million people live in the 2 per cent of land that is less than 10 metres above sea level. Meanwhile, the high seas are likely to see increased competition in pursuit of resource exploitation. Competition will centre on fishing, deep sea mineral harvesting and the extraction of oil and natural gas. But it may also extend to transportation and rights of passage.

Russia's recent claim to the Arctic seabed is an example of this, as is Britain's declared interest in the Antarctic and renewed attempts on the Northwest Passage as the Arctic ice retreats. And this is all our business.

But I would suggest that few people, particularly in Europe or the United Kingdom, are aware of the fundamental economic importance of the sea. World trade, and therefore world stability, is utterly dependent on our ability to use the oceans. More than 90 per cent of the total goods traded internationally throughout the world are transported by sea, involving more than a million mariners and about 50,000 vessels.

During the last 40 years, the population of the world has doubled, but maritime trade had quadrupled and virtually all of it passes through at least one of nine strategically vulnerable choke points. The question that we are beginning to ask ourselves is this: at a time when no country has significant strategic reserves of energy, raw materials or even food, what is our economic and political dependency on the continuation of trade, and how easily can that flow of maritime trade be broken?

For example, if a ship was sunk, blocking the Suez Canal, and the wreckage could not be cleared for a number of weeks, it is self-evident that trade flowing between the Indian Ocean and Western Europe would be diverted around the Cape of Good Hope. You could therefore argue that the Suez Canal is useful but not strategically important. But that is to overlook two very significant factors. First, the blockage of the canal would impose a five week delay on the delivery of trade to and from Europe, and secondly there are simply not enough ships in the world to service demand with this additional transit time built in.

In September 2002, there was a strike by dock workers on the West Coast of the United States and, despite the port authorities' best efforts to divert traffic to Mexico and Canada, within 10 days more than 200 ships (300,000 containers) were anchored offshore waiting for a berth. The economic impact was estimated conservatively at about US\$1.5 billion per week – some estimates went as high as US\$1 billion per day. In the United States, it affected food processing and availability, industry and consumer prices. It affected the exporting countries including Hong Kong, Singapore and Malaysia, and it also had a domestic political effect, with trade groups reporting in the media that they were 'extremely disappointed by the administration's hesitancy'.

It would seem wise to veer towards a higher figure of economic effect: in December 2007 the London *Daily Telegraph* estimated the cost of the planned two-week Christmas and New Year shutdown in the United Kingdom at about £21 billion, or US\$3 billion per day – and that is with sufficient fuel in the petrol pumps, and enough food in the shops. What would be the effect of an unplanned, extended stoppage? You could probably double this figure – and that is just for one country. To put that in perspective, this would amount to 50 per cent of the Royal Navy's annual budget each day.

The five week delay caused by the closure of the Suez Canal would be crippling to countries on both sides of the canal. But that is not the only critical point in world trade: there are many others where shipping could effectively be halted: the Strait of Hormuz, the Malacca Strait, Gibraltar, and for the United Kingdom specifically – Milford Haven, one of our principal energy terminals, or Felixstowe, our biggest container port. There are many more.

It is easy to portray this in terms of national interest, but that would be a mistake. If there is one thing that we have been taught by the US sub-prime mortgage financial crisis, or the terrorist attacks on the United States on 11 September 2001, it is that any sort of localised trouble has an unpleasant tendency to spin off into the

global economy. We are all connected by the flow of goods. Quite simply, trade is the principal enabler of global economic growth and it is not as robust as we would sometimes like to believe. Any interruption – or even the threat of an interruption – will be devastating and the damage will not just be financial. Probably more significant will be the effect on public, political and market confidence. Underwriting the security of global trade is therefore something on which we all need to cooperate, because if we let it go, we will share the consequences. A more dispersed non-state threat of the sort we are facing today makes this kind of disruptive action more likely, particularly since even a temporary interruption will be sufficient to have a lasting effect.

Maritime forces can do two things to help underwrite security of trade: by making sure that the most vulnerable choke points are secure, and by encouraging and promoting stability among our trading partners. This is not a job for a single, global navy: it requires the active cooperation of us all.

And lest we have any doubt about the power of these economic arguments, take a look at the way the bad guys are thinking. There is a very significant gearing ratio between a terrorist's investment and the level of pain that he can inflict. But this is not just an issue of terrorism: this sort of economic impact can be brought about by deliberate national action, or even by a concentration of small-scale effects such as piracy.

Piracy, as we all know, is on the rise. The International Maritime Bureau reported 198 attacks on ships between January and September 2007 - up 14 per cent worldwide on the same period in the previous year, with Somalia and Nigeria showing the biggest increases.

This sort of ragged disorder on the high seas spans many areas of criminal activity. Human trafficking is now the fastest growing criminal business in the world, worth about US\$7-10 billion. The vast majority of this trade relies on transport by sea. Maritime drug trafficking is continuing to grow and as a consequence of the illegal use of maritime transportation, the street prices continue to fall. So there is a lot for us to do.

And it is in this unstable geo-strategic environment that navies excel because of their agility, and the wide range of capabilities and responses that a single warship can apply.

All around the globe, nations are investing in naval power. Previously, maritime arms races have not generally resulted in peaceful outcomes, but it is entirely possible to see the growth of maritime power in a constructive light: there are big problems to be solved and it is very much in our collective interest to work together in shoring up regional and global security. This was, I think, the idea behind Admiral Mullen's statement a couple of years ago that he wanted to establish a 1000-ship Navy.

A fleet-in-being, if you will, comprised of all freedom-loving nations, standing watch over the seas, standing watch over each other.

Adding that his vision

... is to extend the peace through an interconnected community of maritime nations working together.

In this context, it is interesting to consider the emergence of the People's Liberation Army Navy (PLAN). Its growth is both rapid and impressive, with conventional and nuclear submarines, modern destroyers and frigates, together with an export program for both platforms and systems. Although the capability of their platforms has yet to be demonstrated, China seems set on establishing a force that is powerful enough to be taken seriously, and we will all be aware of the incident in 2007, close to Okinawa, when a Chinese *Song* class diesel submarine surfaced close to the US Navy aircraft carrier, USS *Kitty Hawk*.

It was an impressive display of growing confidence and capability, but this is not to suggest that we should necessarily consider the PLAN to be a threat, any more than our own shipbuilding and capability improvement programs in the United Kingdom are intended as seen as a threat. China doubtless has eyes on its own maritime security, just as we do, and it will be conscious that closure of the Malacca Strait for instance could choke off 80 per cent of her imported oil, together with much of her ability to export to the West. There is a significant common benefit from any efforts that she might make to support maritime security.

The power of navies lies in their ability to prevent conflict in a risky world, and of course they do this in a number of ways: by exploiting global reach; by their ability to poise in international waters; their capacity to change posture in tune with the political climate and to deliver diplomacy and deterrence in support of the political ends. One of the challenges that we face in the maritime environment is to ensure that we understand each others' interests and intentions, in order to better avoid confrontation. And that of course is why events like this are so immensely important. Seafarers are naturally gregarious people: I have had the privilege of meeting naval officers from all over the world during the course of my career, and I have never had a moment's difficulty in getting on with them. At the end of the day, I am firmly convinced that the ability of the seafaring community to make friends contributes to greater understanding and wider cooperation, and ultimately reduces the risk of miscalculation.

And so, if I may, I will turn to the United Kingdom's interest in the Asia-Pacific region. This is a region of primary importance to the United Kingdom for reasons that are not novel but are probably worth restating nevertheless. Quite apart from the fact that there are a large number of cricket and rugby-playing nations in this part of the world, the United Kingdom has a significant dispersed population in Southeast Asia, the Pacific and Australasia, as well as long-standing historic, cultural and military links. Moreover, the United Kingdom has a specific defence interest in its overseas territories, including Pitcairn Island. Our economic links are strong too, with a healthy level of mutual trade and investment. Without doubt, the stability of this region is important to us.

Over and above this, the United Kingdom has a direct defence interest in Nepal, Brunei, and the British Indian Ocean Territories, with enduring military links to a number of other countries, including the Five Power Defence Arrangements (FPDA) with Australia, New Zealand, Malaysia and Singapore, which remains the cornerstone of our defence engagement in the Asia-Pacific region. And for all of these reasons, together with a continuing desire to maintain friendships, coalition interoperability and mutual understanding, we continue to send maritime units to this part of the world.

It is, ultimately, this maritime engagement that makes us very keen to obtain observer status in the important work of the Western Pacific Naval Symposium (WPNS). We were, I think, a little disappointed that the Royal Navy's application in 2006 for observer status in the WPNS did not receive consensus approval, not least because we have much to offer, and this is an opportunity to forge relationships and share best practice with like-minded nations on a range of security-related issues.

In saying this, you will recognise that the Royal Navy is operating under fairly tight resource constraints. Quite simply, domestic pressures on the political agenda limit the resources available for defence, and together with a heavy burden of operational commitments this is impacting increasingly on our ability to deploy as widely as we would wish. But our limited re-engagement in the area is, I think, a clear indication of our growing appreciation of the importance of the region for global security and prosperity.

So How, Exactly Does the Royal Navy Look Today?

As presently constituted, the Royal Navy is designed to perform two tasks: maritime security and force projection. And the more demanding of these two roles, force projection, is – and will continue to be – delivered through littoral manoeuvre and maritime strike. Currently, and rather perversely the Royal Navy's force projection efforts today remain rooted in sustained operations some 500 miles from the coast – in Afghanistan.

Until early last year, members of the Royal Navy accounted for more than 50 per cent of the United Kingdom's military presence in southern Afghanistan. These consisted of 3 Commando Brigade Royal Marines, the fast jets of 800 Naval Air Squadron, and a large number of supporting and medical personnel, together with a variety of naval helicopters. This intensity of commitment will continue for some time to come: today we have 40 Commando Royal Marines in Afghanistan, together with our Harriers, some helicopters and, once again a significant body of supporting personnel. This is on top of our commitment to Iraq, and a permanent naval presence in the Arabian Gulf.

However, more widely, the Royal Navy's maritime force projection capability is embodied in the Carrier Task Group. The future carrier strike program, which will be at the heart of the United Kingdom's joint expeditionary capability, replaces our current small aircraft carriers and the Harrier ground attack force with two ships of about 65,000 tons and the immensely capable Joint Strike Fighter, which is

currently in production in the United States. This means that within eight years the United Kingdom will have significantly greater fixed-wing strike and surveillance capability, with the capacity to be based at sea or ashore as conditions dictate. Carrier strike will form the core of the most capable mobile strike force outside the United States, and will represent a quantum step-up in military capability for the United Kingdom armed forces.

Additionally, though the United Kingdom has the capacity to project force ashore from the sea with a number of capabilities centred on a sea-based joint amphibious force that can threaten, apply and sustain operations ashore. New capabilities have recently been added to this force.

We have a modern Amphibious Task Group built around the two new assault ships, HM Ships *Albion* and *Bulwark*, the helicopter carrier HMS *Ocean*, the four large *Bay* class landing ships, supported by six Ro-Ro ferries, all of which enable the United Kingdom armed forces to deliver a brigade ashore, at a time and a place of our choosing, and in areas that are not easily accessible by air, or where there is little or no adjacent host nation support.

Our aircraft carriers, deep strike aircraft, specialist shipping and landing forces will be complemented by increasingly versatile surface combatants, submarines and rotary wing assets. And of course, over the next few years we will see the introduction into service of the Type 45 destroyers.

The first-of-class, HMS *Daring*, was launched in February 2006 and is now performing well. The third of the class, HMS *Diamond*, was launched in November 2007. These are, if I may say so, breathtakingly capable ships that will provide vital force protection to our maritime forces for many years to come.

Under the water, we are now well on the way towards replacing some of our older nuclear submarines with the *Astute* class of nuclear submarine, with impressive capabilities including an enhanced Special Forces launch capability and extended range Tomahawk missiles. The first of class, HMS *Astute*, is presently undergoing extensive pre-sea trials.

None of this, of course, is possible without logistic back-up, and to replace our existing fleet of naval auxiliaries we are embarking on a program to build specialist replenishment and support ships. This is a fundamentally important enabler of the Royal Navy's future global reach.

We are also planning to renew our independent nuclear deterrent force over the next two decades.

So that is the Royal Navy as we see it evolving. Like all navies, we are putting an increasing premium on agility: we need the flexibility to routinely deploy ships and submarines around the world whilst maintaining the capacity to switch from independent operations to larger joint combat formations, often within a multinational context.

The complexity of future operations means that they will generally be conducted under United Nations mandate by coalitions of the willing, and they will require us to work – and importantly to train – with likely partners if we are to be successful.

This is another real advantage of global engagement – developing environmental knowledge and building confidence and trust in potential coalition partners at a staff level. This was the real bonus of the recent FPDA Exercise SUMAN PROTECTOR, and of course it also applies to maritime deployments. Last year, HMS *Marlborough* deployed to the Indian and Pacific oceans, exercising with the forces of a wide variety of countries and materially increasing confidence in our ability to operate with these countries, if we ever have to, in coalition operations. All of this ties neatly into the collaborative context of maritime security.

I also mentioned maritime security. Like force projection, this provides a span of potential operations from peacekeeping and peace enforcement to high tempo warfighting, and from sea control to re-supply and theatre entry. It also includes security of the sea lines of communication and all types of constabulary operations including drugs, terrorism, unlawful immigration, smuggling and the security of energy supplies.

In the Caribbean and off Africa we have participated in some very successful anti-drug patrols. The most recent of which was a haul of three tons of cocaine by HMS *Portland* operating in the Caribbean with the Dutch and US navies, the US Coastguard and the US Drug Enforcement Agency.

Nearly always working with coalition partners, we are engaged in maritime security operations in the Mediterranean, the Arabian Sea and off the Horn of Africa, providing reassurance for legitimate users of the sea both singly and as part of NATO Standing Forces.

We continue to provide fishery protection of United Kingdom waters and, in the Arabian Gulf, we have extensive involvement in the coalition, which provides a combination of embargo and counter-terrorist activities, as well as protection for the Iraqi oil platforms, through which flows 90 per cent of Iraq's gross domestic product. The common denominator underpinning these diverse tasks is the latent flexibility and adaptability of maritime platforms in applying effects that are both appropriate and proportionate to achieving the end results.

One important element of maritime security is helping regional partners to develop their own capabilities. We have a continuing commitment to train the fledgling Iraqi Navy using 539 Assault Squadron Royal Marines on the Shatt-a-Arab waterway for riverine patrol work and a Naval Training Team at the base in Umm Oasr. More widely, we are also training the Yemeni Coast Guard off the coast of West Africa.

It was Napoleon who famously confided that he only ever wanted to be served by lucky generals. In a similar vein, the most important element of maritime success is quite simply to be in the right place at the right time. And it is for this reason that a policy of sustained presence is so important.

In November 2007, the British frigate HMS *Campbeltown*, patrolling off the Omani coast, found herself just 120 miles from the cruise ship *Seaborne Spirit* that was becoming concerned by the number of skiffs heading towards her at high speed. She put out a call on VHF radio, which was acknowledged by the warship,

and Campbeltown set off to provide assistance. At the same time, she launched her Lynx helicopter in support.

Now, we do not of course know the full story, but it is perhaps no coincidence that, immediately after these actions had taken place the skiffs reversed course and headed back to the coast - away from the cruise liner. In this case, as in so many others, it seems reasonable to presume that the proximity of a warship that was prepared to intervene was sufficient to deter an attack.

And so in conclusion - I would reiterate my belief that maritime forces, and particularly agile, deployed and joined-up maritime forces have the ability to make a sustained difference in creating the stability that we all need to allow trade to flourish and our economies to prosper.

In an environment where resources are tight, we have no alternative but to build greater transparency and cooperation between all of our navies. If the economy of the United Kingdom can be hit by mortgage default in the United States, it can also be hit by closure of the docks in Shanghai or the loss of a few ships supplying liquefied petroleum gas to Japan. Our job is to make sure we can work together efficiently, that we are all capable of surging units in response to global events, but we cannot surge friendship, familiarity, trust and cooperation. These are the most valuable commodities of all, and they need to be built in advance.

The United States Maritime Strategy

Robert Willard

Every few years our Services revisit the strategies that guide us to ensure that they represent the world situation as it is, that they remain aligned with our national strategies, and that they represent what is achievable. The US Navy recently released its *Cooperative Strategy for 21st Century Seapower*. This strategy is unique in that it contains the signatures of the Chief of Naval Operations, the Commandant of the US Marine Corps and the Commandant of the US Coast Guard, establishing a joint commitment among our three sea Services.

I have seen several strategies come and go in my 34 year naval career. During the creation of this one, we undertook a study to determine the characteristics of maritime strategies that have endured through our history, and most completely fulfilled the needs of our nation. We believe that those characteristics are contained in this effort. There are some very fundamental tenets that provide the foundation for this work, like:

- peace does not preserve itself
- that preventing wars is as important as winning them ...
- that US seapower is intended to be a force for good, protecting our nation's vital interests ... even as it joins with others to promote security and prosperity across the globe
- that the strategy should focus on opportunities ... not threats; on optimism, not fear; on confidence, not doubt

The maritime domain connects this complex world in which we live; the great oceans and seas, waterways and rivers, and they have never been more important than now. More riches flow along our sea lines of communication than ever before, and over the past four decades total seaborne trade has more than quadrupled.

And, most importantly, to understand that '... No one nation has all the resources required to provide safety and security throughout the world's maritime domain ...'.

Following the roll-out of the strategy many assessments were made. One criticism that has been occasionally voiced is that it is not fully representative of our seagoing Services' high-end warfighting capabilities; that it overly emphasises 'soft power'.

I disagree. It would be a mistake for a challenger to believe that this strategy in any way diminishes the US Navy, Marine Corps, or Coast Guard. On the contrary, its' first principles call for global forward presence, regionally concentrated maritime combat power, with capabilities to limit conflict, deter major power war, and win our nation's wars.

Longstanding maritime capabilities that all high-end maritime powers embrace are called out: presence, deterrence, sea control, and power projection. Like all

international maritime services, our Navy, Marine Corps and Coast Guard must be capable across the range of military operations to secure our nation from attack, secure strategic access, and retain our freedoms of action.

This strategy also demands more of us than ever before. As a basis for this additional work, it attempts to capture how significantly the world has changed since our last strategy. Every nation, either directly or indirectly, experienced some or most of the Cold War; and, later witnessed its demise. Our strategies during that time were shaped by a bi-polar world in which superpower alignments dominated the security environment. Navies generally sailed the world's oceans aligned with one side or the other, and the emergence of unaligned, independent rogue or extremist powers was generally held in check by one or both sides as world order demanded. Warfare was mostly about massed combat power, at the high-end.

The new strategy captures a very different 21st century global environment; in some ways, more complex, and in others, more dangerous. The disbanding of alignments, the emergence of transnational extremism, globalisation, the global effects of information, increased competition for natural resources and the increasing proliferation of weapons, contends we are in an era in which we are unlikely to be fully at war, or fully at peace, and that our challenge is to apply sea power in a manner that protects our nation even as it promotes greater collective security, stability, and trust. As a consequence, the strategy calls for the capabilities to exercise maritime security, with many partners, and to perform humanitarian assistance and disaster relief as core competencies.

Herein lies the most significant difference between this strategy and those that came before it; it adds new responsibilities to our traditional ones. Though maritime security and humanitarian assistance missions have been conducted for a century and a half in the Pacific region, now they are considered 'core tasks' that we must organise, educate, train and equip forces to conduct in a standardised manner. There is also a required shift in attitudes for our three Services; we must recognise that there is more to our collective responsibilities than readiness for high-end war. We must improve our abilities to integrate with one another across the range of military operations, and do more to foster cooperation among international partners. We are also challenged to improve our behaviour as partners.

Our strategy acknowledges that though we are globally present sea Services, we are not the world's ranking regional experts. Rather, our regional partners are the experts, and therefore, in many roles, the US sea Services may serve better as a supporting force, instead of the lead.

We plan to adapt our deployed operations to this new paradigm by operating our forward forces in a more disaggregated manner, by empowering our young ship captains and commanders to accomplish these new missions more independently, and by training them to rapidly re-aggregate their combat power on call. Existing venues like Cooperation Afloat Readiness and Training (CARAT) and Southeast Asia Cooperation Against Terrorism (SEACAT) exercises are consistent with this initiative.

In 2007 Indonesia and the United States co-hosted the Western Pacific Naval Symposium Humanitarian Assistance/Disaster Relief (HA/DR) table top exercise in Bali. Admiral Soebijanto and his staff led this coordinated effort that resulted in a valuable exchange among 21 participating nations. And in September 2007 we participated in a successful Exercise MALABAR led by our friends from India, participating alongside Australia, Singapore, and Japan. This summer we plan to continue our Pacific Partnership mission, bringing together international medical, dental and engineering teams working in concert with non-governmental organisations to provide Humanitarian Civic Assistance to nations throughout the region. All are excellent examples of how we intend to work with our friends, allies and partners in the future.

This is not just another new strategy document. Everything we are programing and everything we are implementing in training and operations is intended to be consistent with this cooperative strategy.

We appreciate the roles our friends, neighbours, partners and allies play in helping to advance this cooperative strategy and to secure our world's fragile maritime domain. The US sea Services intend to do their collective part to work with each maritime nation to ensure that the security of the maritime commons meets all of our expectations, and we believe this cooperative strategy will guide our way.

The United States Maritime Strategy and Implications for the Indo-Pacific Region

Peter Dombrowski and Andrew C Winner

On 16 October 2007, Admiral Gary Roughead, the US Chief of Naval Operations, publicly unveiled the new US maritime strategy: *A Cooperative Strategy for 21st Century Seapower*. With his fellow maritime Service chiefs in attendance – General James T Conway (Commandant of the US Marine Corps) and Admiral Thad Allen (Commandant of the US Coast Guard) – Admiral Roughhead chose an extremely symbolic venue to announce the strategy: the 18th International Seapower Symposium, a biannual gathering of chiefs of maritime Services from around the world, held at the Naval War College in Newport, Rhode Island. Introducing an important US strategy before such a prestigious and influential international audience demonstrated that the US sea Services were deadly serious in their commitment to work with partner countries.¹

A Cooperative Strategy for 21st Century Seapower,² once implemented by all three maritime Services through a family of associated plans, programs, and operating concepts will change how US maritime forces advance American national security interests around the globe. The Indo-Pacific region, identified in the strategy as an area of geographic focus for forward deployed 'credible combat power', will, in all likelihood, be affected more significantly by the new strategy than any other maritime area of operations.³

The new maritime strategy is likely to be one of the last, if not the last, strategy issued by the Bush administration. It can therefore be understood as a transitional strategy to whatever new administration will occupy the White House in January 2009. In fact, despite its position as a subordinate strategy to the National Security Strategy or a President's chosen grand strategy, A Cooperative Strategy for 21st Century Seapower contains language and ideas that could influence higher level considerations. While such an attempt at upward influence, in this administration or the next, was never publicly articulated by Navy, Marine Corps, or Coast Guard leadership, it is possible to see how some of the emphases of the new maritime strategy - such as the increased use of diplomatic and other 'soft power' tools - have gained currency in statements by newer members of the current administration.⁴ Another way to view the strategy is as the first post-Iraq war strategy in the sense that it is the first strategic document that implicitly recognises not just the implications of the 21st century security environment that was brought to the forefront by the attacks on 11 September 2001, but that it also recognises that the United States will have to confront that environment with both the domestic and international legacy of the Iraq war.

This paper describes the origins of the new strategy and provides an initial analysis of how it will impact the Indo-Pacific region. The paper begins with a brief description of maritime strategies in their historical context to provide some grounding for the analysis that follows. It then discusses why the US Government, and particularly the leaders of the US maritime Services, believed that a new strategy was necessary at this point in time. It then describes the development of the maritime strategy, particularly the role played by the analytic team at the Naval War College. The second half discusses the maritime strategy in the Indo-Pacific context. Specifically, it examines the strategy as it may affect three major Asian maritime powers – China, Japan, and India – as well as the Southeast Asian subregion. These sections include early reactions to the strategy and examine some of specific issues likely to be encountered in its implementation with regard to these countries.

United States Maritime Strategies in History

Many early reviews of *A Cooperative Strategy for 21st Century Seapower* claimed it is the first major revision of maritime strategy since the 1980s. We believe this is misleading. Depending on who is counting there have been '[At] least 20+ capstone documents since 1970,' with perhaps sixteen of those following the famous 1980s strategy.⁵ The *Maritime Strategy* was articulated by then-Secretary of the Navy John Lehman; it focused on fighting and defeating the Soviet Union and its Warsaw Pact allies by horizontal escalation.⁶ Since the 1980s strategy, however, the US Navy has issued a number of documents, some of which have been referred to as strategies, others of which have been used as such, even if they did not carry that name. These include the post-1991 Gulf War ... From the Sea: Preparing the Naval Service for the 21st Century, the updated 1994 Forward ... from the Sea ..., and the vision document issued in 2002 known as Sea Power 21.⁷ The twenty-plus capstone documents that have been written by the US Navy over the last forty years continue a tradition of strategic thinking dating to the very origins of the US Navy.

If there is a rich tradition of strategic thought by the US Navy, rarely has this extended across service lines to encompass the US Marine Corps or the US Coast Guard. For the US Marine Corps, much of its service life was spent as an appendage, albeit a valuable and valued appendage, of the US Navy. The US Coast Guard, despite a heritage dating back to the revenue cutters of the Continental Congress, was even further divorced from the strategic calculus of the US Navy. Although in wartime the US Coast Guard has performed military and maritime functions alongside the US Navy not just in coastal waters but across the globe, seldom did the US Navy incorporate the US Coast Guard or its functions in its planning processes.

In the end, however, the process of developing *A Cooperative Strategy for 21st Century Seapower* helped unite the three Services. Despite the collective process, there was no guarantee that one or more of the independent Service chiefs would not withdraw support for the final document if it did not meet that Service's specific

needs. Only the strength of a common diagnosis of the strategic environment and of US national security requirements in the maritime realm held the three together.

Why Announce a New Maritime Strategy Now?

When it first became clear that the sea Services were developing a new maritime strategy, some critics, even those friendly to the US Navy, wondered why they were launching an initiative in the second term of the George W Bush administration. After all, the nation and the national security community were wrapped up in the Iraq and Afghanistan wars; there was presumably little patience for long-range strategies while American forces were stressed by a major counterinsurgency and a long occupation. Further, given the presidential term limit, the Bush administration's influence over the future was waning. Republican or Democratic, the next administration would surely want to put its mark of military and national security strategy. Any new maritime strategy might soon be overcome by events.

In his first public announcement that the US Navy and the other sea Services were developing a new maritime strategy then-Chief of Naval Operations, Admiral Mike Mullen specified why a new strategy was appropriate. He made two general arguments: America is and will remain a maritime nation, and we live in a challenging new era.8

That America is a maritime nation is no longer well known or understood by the US public and, perhaps, the international community as a whole. Aside from the presence of the US Navy on the seven seas by many measures the United States has lost the historical base for the claim that it is a maritime nation. It has been many decades since American commercial shipping was a dominant player in international transportation markets. The US commercial shipbuilding sector has been kept alive, artificially, by domestic legislation. Fewer American citizens make their living directly from the sea - through fishing for example, than ever before in the nation's history. Yet, Admiral Mullen captured an essential aspect of the American economy: as the world's greatest trading nation both American exports and imports travel predominantly by the seas. The American economy would not be so prosperous and dynamic were it not able to use the world's oceans at will, free from restriction or interference. For Admiral Mullen the touchstones of the new era are the economic integration brought about by the process of globalisation and the emergence of weapons of mass destruction as the most dangerous threat of the post-Cold War era.

Although there has been little public discussion of why the three sea Services chose the year 2007 to unite behind a common vision, outsiders point to several other factors. All three Services are at major crossroads, albeit for different reasons. The US Coast Guard has lost its old institutional home under the Department of Transportation and gained a new one in the Department of Homeland Security. Meanwhile, in the post-11 September 2001 world, it has assumed greater responsibility for homeland defence and law enforcement, not simply in traditional areas like counter-drug operations and anti-crime, but for anti- and counterterrorism both within US territorial waters and increasingly farther abroad. Yet, the new institutional arrangements and increased responsibilities had done little to resolve longstanding funding shortfalls, especially in the face of modernisation and transformation represented by the troubled Deepwater Program.

For the US Marine Corps, the Iraq and Afghanistan wars have once again led the Service away from it expeditionary origins, emphasising speed and mobility, to a long-term occupation and counterinsurgency campaigns. The costs, not only in terms of marines and their equipment, but to the Corps' sense of identity and the appropriate roles and missions it should pursue, are high. Reconnecting with the US Navy and US Coast Guard promised, in part, a way back to more traditional marine functions in the future beyond the immediate, frustrating and draining campaigns.

The US Navy had been largely shut out of Afghanistan, Iraq and even the global war on terror. Aside from providing a seaborne airport for special operations forces operations in the first days of the Afghan campaign the US Navy had been relegated to providing air support and an increasing number of individual augmentees to serve in the Iraq and Afghan theatres. Some reports suggest that the US Navy had been embarrassed at several key meetings assessing Service contributions to the global war on terror. US Navy contributions, no matter how they were presented, were and are relatively modest. In the meantime in the Indo-Pacific region, the most maritime of operational theatres, a variety of threats from piracy to maritime terrorism to the potential emergence of an increasingly powerful regional navy, the People's Liberation Army Navy (PLAN), were growing. Only a return to a maritime vice continental grand strategy promised to restore the US Navy's relevance and prevent the increasingly steep decline in navy force structure.

In short, led by Admiral Mullen the sea Services promulgated a new strategy because they saw they were not well positioned to respond to new security environment. The Service chiefs collectively saw that necessary response as one of protecting American economic interests globally – not by directly intervening for specific commercial reasons – but by serving as a 'system administrator' for the current and future international economy and system of states.⁹

Unofficially and unspoken, a number of other rationales for a new maritime strategy are also evident. First, *A Cooperative Strategy for 21st Century Seapower* can be seen as an early bid to shape the post-Iraq, post-Bush administration direction of American strategic thought. Second, with regard to intra-Service rivalries for roles, mission and funding, the US Navy is a potential loser in the budgetary endgames associated with Iraq, Afghanistan and the global war on terror. None of these conflicts have stressed the role of naval forces, except perhaps the earliest stages of Afghanistan. Finally, in terms of equipment – from ships to aircraft to uninhabited aerial vehicles and command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) systems – the US Navy needs to begin transforming, modernising and recapitalising soon. To guide this process and win congressional support, it needs a compelling vision for its role in ensuring the future of United States national security.

Maritime Strategy Development Process

The formal process of developing a new US maritime strategy began in June 2006, when then-Chief of Naval Operations, Admiral Michael Mullen, announced at the Naval War College's annual Current Strategy Forum that he intended to present a new maritime strategy at that same gathering the following year. With that speech, Admiral Mullen commissioned a year-long strategy development process to which the Naval War College was to make a significant contribution. The Naval War College was tasked to lead an open and inclusive effort to develop strategy options for consideration by the leadership of the US Navy, the US Marine Corps, and the US Coast Guard. From the beginning, it was the intention of the leadership to make the new strategy truly maritime – signed by the heads of all three US maritime Services – and not applicable for only the US Navy.

At the time of the CNO's announcement, the US Navy was not lacking in strategic guidance from civilian authorities. The Bush administration had issued more public strategies than any of its three predecessors, including two unclassified National Security Strategies as required by the Goldwater-Nichols Department of Defense Reorganization Act 1986.11 These strategy documents have subordinate documents - a National Defense Strategy and a National Military Strategy - as well as several national strategies addressing particular issues such as the war on terrorism, the proliferation of weapons of mass destruction, and a National Strategy for Maritime Security.¹² The Quadrennial Defense Review (QDR), which provides a mix of strategy and budgetary guidance, was in the process of being finalised in the Department of Defense. 13 The US Navy itself also had a number of documents that provided guidance on a range of issues of importance to it and to the maritime Services more generally, including the joint Navy-Marine Corps Naval Operational Concept (NOC), issued in 2006 and the classified Navy Strategic Plan - a document that provided guidance to program managers seeking to procure the next generation of naval platforms and systems. The US Coast Guard was at the time working on its own strategy, which was issued in January 2007 - part way through the maritime strategy development process.¹⁴

Starting with the worldview described above, and obviously being aware of existing policy and programatic guidance, Admiral Mullen and the senior US Navy leadership, issued several basic points of guidance for the strategy development process. The leadership wanted an open 'competition of ideas' and wanted the process to be inclusive. This meant not just the direct and deep involvement of the US Marine Corps and US Coast Guard, but the gathering of information, opinions, and analysis from the other US military Services, government civilians from the Department of Defense and other departments, academics, close US allies and partners, as well as ordinary US citizens. The Naval War College strategy option development process was also directed to stay above the maritime platform level and away from resource questions. The idea here was to avoid having the strategy option development process devolve into a fight among bureaucratic fiefdoms within the US Navy (such as surface warfare versus aviation), between the Services,

or to get bogged down in the minutiae of budgets. Resource questions would be addressed during the more formal staffing and development of the final strategy. The US Navy leadership also insisted on an intellectually defensible process, complete with an audit trail and transparency. Although some veterans of previous strategy development processes suggested that it was most efficient, the US Navy's senior leadership did not want a strategy that was developed in secret by a small number of specialists, where the assumptions, arguments, and processes were not clear and defensible. Finally, from the start, the strategy development process was unclassified and the resulting strategy is thus unclassified and public.

The Naval War College was tasked to generate maritime strategy options as well conduct as a preliminary assessment of these options. These options were to be delivered to the US Navy, US Marine Corps, and US Coast Guard staffs in March 2007. They would then review, refine, and further process the Naval War College developed options. The final strategy would be drafted by a small group of the three Service staffs and signed out by the three Service chiefs, with the goal of announcing it at the June 2007 Current Strategy Forum.

In July and August 2006, the Naval War College developed and began to implement an analytic approach to developing the options desired by the senior leadership of the maritime Services. The Naval War College saw its role as providing research, analysis, and war gaming, integrating input from multiple individuals and organisations, providing a US Navy community-neutral ground on which to discuss and debate issues and options, stimulating international cooperation in the strategy option development, and supporting outreach to the country as the development process went forward.

The Naval War College team, with support from designated US Navy, US Marine Corps, and US Coast Guard officers and civilians, began the development process by convening a session of grey beards – a mix of civilians and military officers (most by now retired) who had participated in the development, drafting, and implementation of the 1980s maritime strategy. The goal was to mine their collective wisdom about both the process of strategy development and about what a strategy might look like for today's world. The session provided useful advice. The grey beards reinforced the fact that this new strategy was being developed in an entirely different era – both in terms of the international environment and also in terms of the US bureaucratic and policy environment that the new maritime strategy would have to influence and in which it would have to be implemented.

The maritime strategy of the 1980s existed before the United States had reorganised its defence establishment in line with the *Goldwater-Nichols Act* and before it created unified combatant commands. Therefore, the 1980s maritime strategy was a mix of program guidance for procurement – with the 600-ship navy as its headline goal – and operational guidance for how detailed war plans were to be drawn up. It was not a joint document. It was a plan for how the US Navy was going to make its own unique contribution to the potential fight against the Soviet Union. Developing a new maritime strategy in 2006 would require taking into account the

vast changes to the US Defense establishment that had taken place over the past 20 years. First, as noted above, detailed and specific national strategies existed for the US national security community, the Department of Defense, and the Services. Second, contingency and war plans were the purview of the regional and functional combatant commands, not the Service chiefs or their staffs. Third, to be effective bureaucratically and in terms of the global environment, strategies had to be joint – including the other uniformed Services, and increasingly, interagency cooperation across departments and organisations. ¹⁵

The grey beards conference also reinforced what was obvious to the US Navy's senior leadership and the analytical team in Newport – the world had changed fundamentally since the last time such an intensive strategy development process had taken place in the US Navy. It is no longer a bi-polar world with a single overwhelming threat; strategies could no longer have a single focus, with all other contingencies considered to be lesser, included cases for which the primary strategy's ways and means would be sufficient. As a consequence, the Newport analytic team sought a better understanding of the current geo-strategic environment as the first step in the analytic process. Because time was short and significant futures work had already been done both inside and outside the US Government, the Naval War College team mined existing 'futures' work for insights relevant to the future maritime domain. This mining and selection of key elements from a range of geo-strategic environment work provided a back-plane against which other analysis could take place. The review and culling of information did not provide certainty about the future, but it did help identify key facts, trends, and uncertainties.

The Naval War College team also realised that perhaps the greatest uncertainty was the future direction of US grand strategy. While, in keeping with guidance, a decision had been made to develop the policy options 'top-down,' it was realised that the higher level strategic policy direction, provided in current day by the mix of Bush administration national security documents was not fixed. In fact, the thought was that the strategy would be developed looking out 10-15 years - beyond the current future years defence plan program and budgeting cycle but not so far in the future as to not be able to have an impact on future plans and concepts. Given these factors, it was decided to try to develop options that would be robust across a plausible range of future US grand strategies. This range of grand strategies was developed from the work of civilian academics.¹⁷ While understanding that the new maritime strategy would likely last across administrations, the analytic team used current strategy documents from which to draw the national security objectives that a new maritime strategy would have to support. It was felt that the unique contribution that the maritime strategy would make would be particularly in the ways in which maritime forces would contribute to meeting these ends.

From the start, the team struggled with the very basic questions of what a strategy consisted of and what made a strategy a good one – namely robust, complete, and able to be implemented. To answer these questions, the analytic team consulted with policymakers who had been involved in the writing and implementation of

previous national level strategies, looked at current and historical documents, and looked for guides to good strategies. Among the good advice received from other strategists, the team found a particularly useful guide in the appendix of a study by the General Accounting Office (GAO), an analytical branch of the US Congress. ¹⁸ This study was surveying current strategies for their effectiveness. As part of their analysis, the auditors developed a rough and ready set of characteristics that would be desirable in any national-level strategy. Ultimately, the Naval War College analytic team argued that a strategy should contain the following categories of information:

- national security objectives
- · global environment
- maritime strategy concept
- strategic assumptions
- environmental assumptions
- maritime service roles and mission areas
- regional implementation concept
- enablers
- interagency cooperation
- cooperation with other countries.

Using possible future environments, a range of possible grand strategies, and some understanding of what makes a good strategy, the Naval War College analytic team held several strategic-level war games to identify first how the future possible range of potential US grand strategies might interact with potential grand strategies of key global actors that were culled from the strategic environment work. Working down from these possible grand strategies, the analytic team developed characteristics of maritime strategy options that might be derived from the various grand strategy options. The idea was to see how certain maritime strategy options would not only support various grand strategies but how they might affect the views and actions of key global actors. In both of these sets of analyses – which involved games, seminars, and preparatory research and analysis – non-Naval War College experts participated. The Naval War College drew upon the expertise of the other military Services, other government agencies, outside analysts, and academics.

While this internal research and analysis was being conducted, senior US Navy, US Marine Corps, and US Coast Guard leaders, accompanied by Naval War College leaders and professors, held a series of seminars around the United States with concerned citizens to talk about the role of the maritime Services in supporting and defending US national interests – the so-called 'Conversation with the Country'. While a cynical interpretation of this effort would be that the leadership of the maritime Services was engaged in building budgetary support, neither the structure of the talks nor their substance touched much on budget issues. Like the work done at the Naval War College through March 2007, the general level of discussion was at a higher strategic level – discussing national interests, goals, and how maritime Services can be used to further those goals and protect those interests.

In March 2007, the Naval War College analytic team presented five distinct maritime strategy options to an executive committee consisting of three flag/ general officers - one each from the US Navy, the US Marine Corps, and the US Coast Guard. The five strategy options were drawn from the analytic work that had gone before and were an attempt to provide options that were robust across a range of possible future US grand strategies. One option could best be described in grand strategy terms - primacy. Another focused on adjusting force structure to bolster capabilities for certain high-end and low-end contingencies. A third option was again more grand strategic in derivation - an offshore balancing strategy. The fourth focused on sea control as the most critical of all maritime missions. The final strategy was one designed to protect and preserve the global system. These maritime strategy options were meant to stimulate thinking and debate within the Services. The options were not complete in the sense that they did not address the resources necessary to implement them. Elements of at least four of the five options can be seen in the eventual maritime strategy that was drafted by the staffs of the three maritime Services.

The internal staff review process took most of June through September 2007. Three of the options were vetted by three and four-star level joint and Service staffs. A second round of vetting of three strengthened, and by that point modified, options asked for preferences and modifications. From there a core team of US Navy, US Marine Corps and US Coast Guard staffers working out of the US Navy staff created a hybrid strategy. This new hybrid was then presented to the four-star level in each of the maritime Services and eventually agreed to by the three Service chiefs. This would have been the end of it, and Admiral Mullen would have met his deadline of announcing the new strategy in Newport at the June 2007 Current Strategy Forum. However, he was nominated to become the next Chairman of the Joint Chiefs of Staff. His change of position and the nomination of Admiral Gary Roughead to succeed him caused a slight delay in the issuing of the strategy. However, given its emphasis on cooperation, and particularly on international cooperation, it was appropriate that the strategy was publicly launched at the Naval War College during the biannual International Seapower Symposium in October 2007, a gathering of leaders of navies and coast guards from around the world.

A Cooperative Strategy for 21st Century Seapower

From our perspective, four critical points stand out in *A Cooperative Strategy for 21st Century Seapower*. First, it insists that the US maritime forces believe 'that preventing wars is as important as winning wars'. This is perhaps the clearest repudiation of the strategic approach of the Bush administration to be found in *A Cooperative Strategy for 21st Century Seapower*. Rightly or wrongly, many domestic and international observers of the Bush administration strategic documents, not to mention actions, since September 2001 have noted a greater willingness to threaten force against American enemies. From the Bush doctrine's focus on preventive war to the notion of regime change, the administration and its spokespeople have made

it very clear they are willing to use force and fight wars. Some readings of the run up to the Iraq war even suggest the United States manufactured intelligence and objectives to suite its desire to overthrow Saddam Hussein. By focusing on prevention and by implication deterrence *A Cooperative Strategy for 21st Century Seapower* recognised that such approaches may not be the most effective against some potential adversaries or the most practical in the near-term given three costly ongoing wars in Iraq, Afghanistan and the global war on terror.

Second, not all areas of the globe lay equal claim on American maritime forces; they must be concentrated 'where tensions are high or where we wish to demonstrate to our friends and allies our commitment to security.' Although spun in a positive direction this is a relatively frank admission of the geographic priorities of the United States Government and its maritime forces. The pretence that the United States can pay equal attention to every region and respond equally quickly and forcefully in all areas is just that – pretence. As a practical matter this means that the United States will concentrate on the Middle East and the Asia-Pacific region because these are the areas of responsibility where rogue states and non-state threats are most prominent.¹⁹

Third, although US forces can surge when necessary to respond to crises 'trust and cooperation cannot be surged'. Traditionally the United States has justified forward presence as a necessity for warfighting and crisis response. With the new strategy the three maritime Services recognise that the side benefits of presence – deeper local and regional knowledge, established and sustained relationships, and experience working at the operational level – have advantages above and beyond the instrumental needs for shorter response times.

Finally, US maritime Services are a 'force for good.' To build trust and cooperation *A Cooperative Strategy for 21st Century Seapower* emphasised naval missions including disaster relief and humanitarian operations that produce tangible benefits for the citizens of other nations. Such missions facilitate cooperation in part because they represent non-controversial ways in which friends, allies and even potential adversaries can train and exercise together in preparation for potential non-military crises and natural disasters. Along with non-traditional security threats such as environmental enforcement, immigration, fisheries protection and so forth, humanitarian assistance and disaster relief allow governments, and especially navies, do develop working relationships and benefit from positive externalities.

It is worth noting that some critics of *A Cooperative Strategy for 21st Century Seapower* are concerned that the document does not emphasise the traditional role of military force in fighting and winning war. And this criticism is true as far as it goes. But from our perspective, as analysts deeply involved in the research and analysis that underpinned the drafting of *A Cooperative Strategy for 21st Century Seapower*, no one involved much less the Service chiefs who ultimately signed the strategy ever forgot the primary functions of their Services. And just in case anyone listening in Newport might forget, Secretary of the Navy Donald Winter, in his

speech before the world's chiefs of navy gathered for the International Seapower Symposium made it clear:

Let there be no mistake: we are not walking away from, diminishing, or retreating in any way from those elements of hard power that win wars – or deter them from ever breaking out in the first place.²⁰

Strategic Imperatives

The first three strategic imperatives are unsurprising and track quite closely with past US Navy and naval planning documents: limit regional conflict with forward deployed, decisive maritime power, deter major power war, and win our nation's wars. The last three capabilities while not exactly new or unfamiliar have been accorded a primacy of place that is somewhat unusual: contribute to homeland defence in depth, foster and sustain cooperative relationships with more international partners, and prevent or contain local disruptions before they impact the global system.

Defending the homeland has always been a priority of the US Navy but the significance of this task has expanded with the devastating attacks of 11 September 2001. No longer can the US Navy leave homeland defence and security to the US Coast Guard, domestic law enforcement agencies, and the intelligence community in order to focus on 'away games.' Based on inputs from the US Coast Guard during the strategy development process and the American public during the 'Conversation with the Country' that took place simultaneously, the three maritime Services agreed to place homeland defence front and centre.²¹

Recent events and reactions to strategic and tactical errors on the part of the US Government as a whole help explain the thinking of the two remaining strategic imperatives. Go-it-alone policies, even when exaggerated by international critics, have not served US interests especially well over the last few years. Especially in the maritime environment it is only prudent to supplement American resources with those of like-minded nations. There are simply too many potential threats, too much ocean and too many littorals for the US maritime Services to hope to accomplish their mission without international cooperation and support.

Finally, especially with regard to non-traditional security threats – terrorism, piracy, and the like – but also with regard to catalytic events that lead to great power involvement in local and regional crises – the maritime Services recognise that they must pay attention to the details. The cliché 'an ounce of prevention is worth a pound of cure' has been internalised at least in part because sustaining forward presence, and thus force structure, requires a solid rationale. Being in regions with maritime forces capable of intervening in low-end conflicts as well as accomplishing peacetime missions like disaster relief may, in the long run, contribute to US national security as much as preparation for catastrophic terrorist attacks and/or major contingencies.

Expanded Core Capabilities of Maritime Power

As with the maritime strategic imperatives, the capabilities identified in *A Cooperative Strategy for 21st Century Seapower* are mostly familiar: forward presence, deterrence, sea control, power projection, and maritime security and humanitarian assistance and disaster response. Once again, however, the prominence of two capabilities is higher than in the past – maritime security and humanitarian assistance and disaster response. These emphases are entirely consistent with the overall thrust of the document and with trends dating back to the 1990s. In a world where globalisation and, in particular, the prosperity of nations, are dependent on transport of everything from natural resources to manufactured goods to people on sea routes, countering maritime threats, however minor, are part and parcel of the responsibilities articulated by the US maritime Services. And, in the case of humanitarian operations and disaster relief, some anticipate that once the Iraq and Afghan wars are resolved, humanitarian operations in other countries and regions will be possible, and even necessary, given the perceived need to reduce potential breeding grounds for terrorism and weapons of mass destruction production.²²

In the Indo-Pacific region these two capabilities have particular resonance. American responsiveness to the 2004 tsunami struck a positive cord with many countries affected by the catastrophe. Maritime security has a more mixed record. Although Combined Task Force 150 has had success in the waters off the East Coast of Africa with little complaint from governments in the region, efforts by the United States and regional allies such as Japan to engage more in the Malacca Strait and other prime areas for piracy have provoked some resistance on sovereignty grounds among others.²³ Counter-terror operations in the Philippines again have had successes but that country is something of a special case given its long and complicated relations with the United States. Few countries would appear willing in the post-Vietnam era to host American troops in the long-term, even to deal with their own internal security threats.

Implementation Priorities

To implement *A Cooperative Strategy for 21st Century Seapower*, the three Service chiefs focused on three objectives: improving integration and interoperability, enhancing awareness, and preparing our people. Each of these is relevant to how the new strategy affects maritime relations in the Indo-Pacific region. Integration and interoperability are two of the most intractable problems facing coalition operations and even less demanding arrangements such as those required to train friendly navies or fulfil responsibilities under the Proliferation Security Initiative (PSI). Although the primary focus on this implantation goal is within the US maritime Services, the joint world and the interagency process, the implications for how US forces interact with foreign navies are clear.

Enhancing awareness is a critical requirement in a global maritime environment characterised by heavy traffic and high volume of goods, people and most of all information. Combating piracy, maritime terrorism, and trafficking in weapons of mass destruction materials are all data-intensive activities. Information without interpretation and analysis is confusing and often counter productive, however. The maritime Services need the men and women with the skills necessary to operate internationally and understand the complexities of regional and local issues. They need personnel at all levels who have the linguistic skills and cultural and historical understanding to operate in an environment were a premium is placed on human interactions rather than kinetic operations.

The bottom line of *A Cooperative Strategy for 21st Century Seapower* is that:

The strategy focuses on opportunities – not threats; on optimism – not fear; and on confidence – not doubt. It recognizes the challenges imposed by the uncertain conditions in a time of rapid change and makes the case for the necessity of US seapower in the 21st Century.²⁴

Implementing the Maritime Strategy in the Indo-Pacific Region

For the US maritime Services, and increasingly American foreign relations as a whole, the future lies in Asia. Asia is the single most dynamic region in the global economy and the most significant region for the US economy – in 2006, 38 per cent of US trade was with the region, which accounted for about 24 per cent of the gross world product. Moreover, China and India, the world's two most populous nations, both appear on the verge of sustained growth that by definition will reshape global trade, financial, and resources flows over the next several decades – providing, of course, that inter and intra-state conflicts do not undermine progress. Specific US national security objectives in the region include preventing the emergence of a dominant regional power or a coalition of countries capable of damaging US economic, political, and diplomatic interests. Given geography and the distance between the US mainland and Asia, the military instruments of US power are largely maritime. The region hosts the largest concentration of US naval combat power stationed forward with '190 ships, about 1,400 Navy and Marine Corps aircraft, more than 213,000 sailors, marines, and civilians, and 35 shore installations'. Accounts of the single properties of the global state of the growth of

A full assessment of the impact of *A Cooperative Strategy for 21st Century Seapower* would consider the region as a whole, various sub-regions and the individual nations involved either directly through their geographic location or indirectly through their external connections to regional developments. Given the limits of time and space, not to mention the relatively short period since the announcement of the new strategy, we will limit our analysis to a preliminary consideration of several key regional powers – China, Japan and India – and one critical sub-region Southeast Asia.

China

How to 'manage' China's rise, peaceful or otherwise, has become a growth industry within the US strategic community both inside and outside the US Government.²⁷ China's economic success in both absolute and relative terms has allowed it to increase its economic, diplomatic, and political influence globally and regionally. Strategists now fear that China will translate its economic strength into military power by building up its armed forces and using them against US and allied interests in the Asian littoral and, perhaps over time, beyond to the wider Pacific and Indian oceans.

The immediate military challenge for the United States is primarily naval: 'China's naval forces include 72 principal combatants, some 58 attack submarines, about 50 medium and heavy amphibious lift vessels, and approximately 41 coastal missile patrol craft.'28 Recent reports suggest that Chinese maritime anti-access technologies including missiles, mines, and electronic countermeasures are developing quite rapidly. Yet, Taiwan aside, the two nations share a common interest in regional stability, especially with regard to maritime terrorism, piracy and anything else that might disrupt seaborne trade, especially in China's case access to energy supplies from the Arabian Gulf and Africa. Moreover, military-to-military contacts, disrupted for many years following the Tiananmen Square incident in 1989, are gradually being rebuilt. With the US Pacific Command (PACOM), largely a maritime area of operations, the US Navy and US Coast Guard have been at the forefront of increased military cooperation with China in recent years. A Cooperative Strategy for 21st Century Seapower, with its emphasis on localised knowledge, interoperability, and maritime engagement cannot help but facilitate closer ties between the two countries.

Chinese reactions to the announcement of the new maritime strategy are especially interesting to both the US Navy and other governments in the region. Despite official protestations in both countries, China is, generally, considered the most likely future American adversary in the region both because it has the fastest growing and most potentially powerful navy in the Pacific and because the Taiwan question is an acknowledged potential flashpoint.²⁹ Beyond these two issues, conventional wisdom about national security and international relations suggest that a rising power like China will naturally come into conflict with a status quo or even declining power such as the United States. For the United States and regional powers alike Chinese strategic calculations play a key role in their own national security planning.

The initial wave of articles on the new US maritime strategy published in Chinese newspapers and magazines reported faithfully the contents of the document itself, much the way the new strategy was reported initially in the United States press. At most, a few pieces included criticisms of the new strategy that echoed informed opinions in the United States. Thus, for example, Yang Qingchuan, reporting in the *International Herald Leader*, a Beijing based publication, repeats comments from an earlier *Defense News* report suggesting that the newly released strategy does not

address many important issues including the role of the commercial sector, defence industrial issues, and missile defence among others.³⁰

The more analytic articles in the Chinese media discussing *A Cooperative Strategy for 21st Century Seapower* also remain largely positive. Xing Pengyu in *The People's Daily* observed that: '[I]n fact, the words and style of the new US maritime strategy are quite gentle, and it really embodies the lofty ideal of the 'cooperation' banner, and regards war prevention as an important mission of US seapower.' Further Xing Pengu notes that the maritime strategy's focus on trust, confidence building and a 'multipolar world. . . should be regarded as some degree of progress.' At the same time, he considers these developments as simply recognising international security realities and ultimately, 'American hegemony has put on a new cover called cooperation.'31

China's economic rise has been well documented but controversy remains over just how well Beijing will translate commercial success into hard power. The future of the PLAN is an especially contentious topic; although much of the immediate debate in the West centres on whether China has or will have the capability to threaten Taiwan's existence in the near-to-intermediate term.³² As Eric McVadon notes, Chinese officials view PLAN modernisation as necessary to deter 'Taiwan's movement toward independence' and curb 'the ability of the US to intervene rapidly and effectively' should Taiwan officially declare independence.³³ From this perspective naval modernisation is necessary to ensure Chinese sovereignty over Taiwan.

In the longer run, and more directly relevant to the long-term objectives of *A Cooperative Strategy for 21st Century Seapower*, Chinese aspirations to exercise a broader measure of maritime power are even less clear. Some scholars argue that the PLAN has pursued a blue water maritime strategy for more than twenty years.³⁴ Others have argued that a complex mix of globalisation and geo-political thinking are pushing China to focus attention on the maritime commons.³⁵ With its reliance on oil shipped from the Arabian Gulf and Africa through several of the world's most notorious strategic chokepoints, Chinese strategists fear that in the event of conflict over Taiwan or resources wars in the face of global energy scarcity, the United States might possess the ability to strangle the Chinese economy. Roughly 80 per cent of China's crude oil now passes through the Malacca Strait.³⁶

It is no coincidence that high level US officials continue efforts to persuade China to be a stakeholder in the international system. Not long after *A Cooperative Strategy for 21st Century Seapower* was announced, Secretary of Defense Robert Gates argued that 'China's increasing political and economic stature calls for this country to take on a greater share of responsibility for the health and success of the international system.'³⁷

Chinese strategic thought on maritime security and its relations with the United States in the maritime domain remain fluid. As Jonathan Pollack and other have noted, there is 'refreshing' evidence of debate within the Chinese strategic community.³⁸ Yet, even as these developments created a stir in embassies around

the region, Yang Yi, director of the Institute of Strategic Studies at National Defense University and a rear admiral in the PLAN, argued publicly that 'China and Japan will be able to ensure the steady development of their strategic relationship of mutual benefit on the whole if they have political sincerity and have practical and feasible measures to bring this about.'³⁹ In short, for other countries in the region the potential remains to work outside the frameworks and parameters set by the United States. In turn, some US observers fear that one day, perhaps, some Asian countries may even chose to hedge against the power of the United States.

Japan

Japan remains perhaps the single closest American ally in the Pacific region with post-World War II, post-occupation military cooperation dating from the Mutual Security Assistance Pact 1952 and its replacement by the Treaty of Mutual Cooperation and Security (between the United States and Japan) 1960. Today, the United States bases 53,000 troops in Japan at 89 bases reserved for its exclusive use. 40 For the most part, difficult periods in the US-Japanese security relationship including the period following President's Nixon's first trip to China, Japan's economic surge of the late 1980s, the post-Cold War readjustments, and the more recent complications involving Japanese support for US-led operations in the Middle East, have generally been resolved amicably. By some accounts, though, the Defense Policy Review Initiative intended to help adapt the alliance to the 21st century threatened to expose underlying tension over the goals and visions of the two partners.⁴¹ Over time, with relative decline of US power and the increase in American global responsibilities, Japan has played a more active role in both global and regional security affairs, notwithstanding the restraints imposed by the Japanese constitution and political realties.

Relations between the US Navy and the Japan Maritime Self-Defense Force (JMSDF) have been especially close with joint exercises being held periodically since 1955, and multinational exercises (beginning with the United States, Australia, Canada, and New Zealand) including the Rim of the Pacific (RIMPAC) naval exercises since 1980. Recently, Japan joined India, Russia and the United States for exercises off the Japanese coast in April 2007,⁴² and in September 2007 attended Exercise MALABAR in the Bay of Bengal with military vessels and aircraft from the United States, India, Australia and Singapore.⁴³ Indeed, US Navy sources claim they operate as closely with their JMSDF counterparts as any navy in the world, including over 100 joint exercises per annum.⁴⁴

Japanese responses to the announcement of the new maritime strategy have been muted, perhaps because the strategy was unveiled at a time when numerous public challenges were facing the Japanese Government and the JMSDF in particular.⁴⁵ Privately, however, several Japanese officers and national security experts expressed surprise at the document's well known silences. Why didn't the strategy make explicit reference to China or even, with any significant detail, regional issues, especially those involving the Asian littoral?⁴⁶ Standard answers

that *A Cooperative Strategy for 21st Century Seapower* was not intended to discuss individual nations, regions, or potential threats did little to alleviate concerns. Some experts even gave voice to long-standing fears among conservative elements in Japan that the United States might somehow make a strategic bargain with China that betrays Japanese national security interests, ultimately raising, in the words of Richard Samuels, 'the possibility of abandonment by the United States'.⁴⁷

All of this suggests that recent analyses arguing that the US-Japanese Alliance has deepened in recent years, may rest on shakier foundations, at least on the Japanese part, than has been considered. Not only will closer ties, especially in terms of greater public support for US policies, lead Japan to be a more demanding ally, they might also reveal that Japan's choice to throw the nation's lot in with the United States is more contentious than some have believed. Despite repeated assurances by Minister for Foreign Affairs Masahiko Koumura that 'The Japan-US Alliance is the cornerstone of Japan's foreign policy', some commentators suggest that the Fukoda Government may eventually cool toward the United States not simply because of geo-strategic considerations but also because the continued presence of US forces on Japanese soil incur domestic costs. 50

Grand strategy implications aside, maritime security is the key to Japanese prosperity. As is the case for both the United States and China, Japan depends on the sea for access to the world's markets. Like China, Japan depends on the oceans to bring its exports to market, but also for access to the raw materials including energy that its island archipelago lacks. A US strategy based ultimately on ensuring access to the global commons for every trading state should be appealing, especially since the new strategy implicitly disavows the unilateralism that characterised much of the current Bush administration's diplomatic and political relations in the world in the first six years of its tenure.

The details of how US maritime forces implement the strategy in the Indo-Pacific region will dictate the depth and extent of Japanese support for the new strategy. Two initiatives that predate the strategy fit well with *A Cooperative Strategy for 21st Century Seapower* and the US Navy leadership's push for sustained engagement with maritime partners: the 1000-ship Navy concept, now known as the global maritime partnership, and the global fleet station concept. However, in all likelihood these concepts will not emerge in concrete terms in the Indian Ocean or the Asian littoral for some time because they are undergoing their first significant test runs in the Caribbean and the Gulf of Guinea. When, and if, it is determined that these concepts are deemed useful and executable, they will be adapted to the Asian environment.

Indirect evidence suggesting how Japan will react to *A Cooperative Strategy for 21st Century Seapower* in the long-run can also be found in Japan's role in the Proliferation Security Initiative (PSI). Although the PSI is not, strictly speaking, a US project, they helped push it forward publicly and behind the scenes with diplomatic and administrative support. Japan has also been a major supporter of the PSI. As a founding member of the PSI and an active participant in the initiative's

Operational Experts Group it hosted two major exercises in 2004 and 2007. Japan has also hosted outreach events to educate other Asian countries about PSI, helping to make it seem like less of a US-only initiative. The PSI provides a domestic political and international diplomatic umbrella under which Japan can pursue a more expansive maritime strategy of its own, one more commensurate with ensuring its global maritime interests. Interestingly, given the tri-Service focus of *A Cooperative Strategy for 21st Century Seapower*, the lead agency for Japan's PSI activities has been the Japan Coast Guard, although since 2004 the JMSDF has been directly involved in PSI exercises. In any case, an argument can be made that the Japan Coast Guard has increasingly become a smaller, less capable, version of the JMSDF, if not exactly a fifth military service like the US Coast Guard. ⁵¹

Japan has also been active in Southeast Asia trying to support regional maritime security efforts without, as much as is possible, raising concerns or resistance among states in the region. Examples include Japan Coast Guard assets that have been combined with security assistance to improve training; equipment supply including patrol boats, and cooperative dialogues such as maritime conferences in Southeast Asia.⁵² These efforts to provide security assistance and operational support have met with mixed success, however. Several regional partners remain wary of Japan due to lingering historical animosities and commercial rivalry. China's growing involvement in Southeast Asia has not made Japan's initiatives any easier. Insofar as the US maritime strategy envisions more engagement in maritime security, US diplomacy and especially naval diplomacy will be tested. In effect, to pursue US national security interests under the precepts of *A Cooperative Strategy for 21st Century Seapower*, the United States will have to triangulate amidst the manoeuvring of regional powers like China and Japan as well as the sensitivities of local authorities.

India

Compared to China, there has been a paucity of public comment in India on the new US maritime strategy. This is not terribly surprising for two reasons. First, the strategy was publicly unveiled at the same time that the United States and India were in the throes of dealing with the domestic Indian upheaval about the recently signed US-India nuclear agreement. As will be discussed in more detail below, the nuclear agreement was seen by both sets of strategic elites as a central strategic undertaking by the two sides. Hence attention on the relationship between the two was focused at the grand strategic level – at least two levels higher than the level at which the maritime strategy will operate. Also, at that point in time, the nuclear agreement was also potentially going to bring down India's ruling government coalition. Therefore, what seemed like a momentous event in Newport did not make too many waves in New Delhi or Mumbai.

Second, the release of A Cooperative Strategy for 21st Century Seapower would likely have only caused a slight ripple in the Indian strategic community, even if it were not competing with coverage of the crisis over the nuclear agreement. One

potential reason for this is the long-time domination of land-centric considerations in India's foreign and security policy. Despite the urging of the relatively small number of maritime security experts in India, New Delhi has only recently begun to consider seriously both the threats and opportunities afforded to India by the maritime realm.⁵³ In fact, at least one well-informed commentator has argued that there has been a significant shift in Indian strategic thinking in the past two years, with maritime considerations now finally beginning to get their appropriate due.⁵⁴ Indeed, almost at the same time as the United States, India has issued its first public maritime strategy, titled *Freedom to Use the Seas: India's Maritime Military Strategy*.⁵⁵

India's newly published maritime strategy differs from the new US strategy in two key respects. The first is that it was signed only by the Chief of the Indian Navy, Admiral Sureesh Mehta, despite the fact that it was published by the integrated headquarters of the Indian military. While India does not have a marine corps, they do have a coast guard of significant size and responsibility.⁵⁶ The Indian Coast Guard is mentioned in the document, but it does not appear to be the sort of joint effort that produced the new US strategy. The second is that it is, in both title and content, a military strategy. Like the US maritime strategy, the new Indian maritime strategy will operate under the broader guidance of that country's grand strategy and within the bounds of the political-military context of the evolving US-Indian strategic relationship. Indeed, Admiral Mehta, in the introduction to the strategy, notes that it should be read in conjunction with the joint doctrine of the Indian military forces, a statement which underlines both its complementary nature and its military emphasis. This means that two sets of factors will frame the maritime relationship of the two countries under their new strategies. The first is the will and capability that the Indian Navy (and potentially the Indian Coast Guard) brings to the relationship. This in turn will depend on the strategic guidance provided by civilian authorities and the finances available to see that guidance carried out. The second is the direction and evolution of the US-Indian grand strategic relationship, which is set against both a difficult history and some potentially confounding circumstances in the Indian Ocean region.

Of the six strategic imperatives in the US maritime strategy noted above, four potentially impact India and the US relationship with that growing Asian power. The new US strategy specifically states that substantial US maritime forces will be in the Indian Ocean region for the foreseeable future. The first US strategic imperative of limiting regional conflict with forward deployed, decisive maritime power raises the question of how the maritime forces of these two states will work together, either in a complementary or supplementary fashion, to achieve such a goal. The question arises as to whose responsibility it is to intervene in, and limit, regional conflicts in the Indian Ocean region. A related question, which will colour all aspects of the future maritime relationship, is what political and legal frameworks will be used to support such an undertaking. These same questions apply to a second US strategic imperative – preventing or containing local disruptions before they impact the

global system. On the one hand, India will have an increasing stake in the stability of the global economic and trading system as its economy continues to grow and particularly as a larger and larger portion of it are tied to the global economy. On the other, India may not yet have a consensus at the political level that this is a role it wants its maritime forces to play – whether this is in the Indian Ocean region or more broadly.

A third US strategic imperative is deterring major power wars. India is clearly a major power. It has a history of wars and crises with other major powers in Asia, specifically Pakistan and China. India has deterrence listed as one of its first military objectives in its new maritime strategy. It also lists as another objective the ability to 'comprehensively subdue a range of adversaries in a conflict'. ⁵⁷ There may come times when India's interest is in subduing an adversary when it is a strategic imperative for the United States to deter a war between India and that particular adversary. This is not a new issue in US-Indian relations in that, at times, India has sought to keep extra-regional powers out of conflicts it has had, particularly with Pakistan, while the United States has – at times – intervened politically and at times through the use of military force movements and military supplies – to damp down what it saw as dangerous crises. For the purposes of implementing the new maritime strategy, this will likely remain an issue behind the scenes until the next regional crisis involving India and another major power, should one arise.

The fourth US strategic imperative is fostering and sustaining cooperative relationships with more international partners. Given India's location, the improving strategic relationship, and the size and increasing capability and capacity of India's maritime forces, it is a logical international partner for the United States. Discussions between US and Indian national security experts over the past year have identified the maritime realm as an area of significant promise. The latest iteration of the annual US-Indian MALABAR naval exercises involved aircraft carriers from both countries and was conducted at a much higher level of tactical complexity than ever before. The latest iteration of the exercise also involved participants from the navies of Australia, Japan, and Singapore as well. On the one hand, this points to a willingness on the part of the United States and India to exercise at a high level and with like-minded states without any formal alliance or arrangement. This would seem to fit the cooperative model posited in the strategy. On the other, the tactical complexity of exercises can continue to increase, but without a politicalmilitary context in which to put it, the continued work can be pointless. At least one prominent Indian maritime thinker made this point recently and called for an increase in political-military content and context to guide the improving maritime relationship between the two states.⁵⁸

This political-military context for cooperation with the United States in the maritime realm is the key question for the future of US-Indian relations under the rubric of the new US maritime strategy. The context implied in the new strategy – what is now called global maritime partnerships – is still relatively ill-defined and poorly understood. It is not a treaty relationship nor is it a Cold War-style great

power and subordinate power relationship. It has aspects of the coalition of the willing concept that was pioneered by the United States for the 1990-91 Gulf War. It also has the potential to be like the cooperative effort being undertaken under the PSI rubric – where participants agree to a set of general principles and then undertake to participate in activities under the general rubric of the initiative that it deems useful. The participant also has the option of opting out of particular activities if it does not suit its interests. Again, while these maritime partnerships are still in their infancy, one would assume that one partnership does not necessarily have to look like another, and the activities undertaken under each partnership can differ according to the desires of the participants.

Getting this right will take some work both on the United States and the Indian sides. For the United States, it is figuring out how to adjust programs, policies, and patterns and habits of cooperation formed during the Cold War and adjusted only partly in the wake of the fall of the Berlin Wall and again after 11 September 2001. Having supportable programs and policies flexible enough to support these maritime partnerships when there is not a clear enemy to combat in the short run (either of a Cold War type or a non-state terrorist type) will be a challenge for the US. For India, the broader challenge is defining its security relationship with the United States in a way that does not trigger concerns over its sovereignty or freedom of action. This concern is a real one, highlighted by the fact that both the Indian right - the opposition Bhartiya Janata Party (BJP) - and the Indian left, the Communist Party of India (CPI) used similar arguments against the fledgling nuclear deal, namely that it undermined India's sovereignty. A previous national security advisor for a BJP government in India recently wrote that India should have 'no subservient relationships.'⁵⁹ While the United States clearly does not envision its maritime partnerships as subservient relationships, perceptions matter as much as reality, particularly given the history of up and down relations between the United States and India. As one astute observer of Indian foreign policy has noted, this maritime partnership will require India to tackle the 'fundamental tension [...] between India's declaratory positions on 'non-alignment' and real world 'strategic cooperation' with great powers' particularly the United States.⁶⁰

Because of these sensitivities and the adjustments that will be required in programs and thinking on both sides, it may take a significant amount of time for the United States and India to arrive at a mutual understanding of what this cooperative maritime relationship might look. The challenge for both states is to make sure that this slow evolution does not derail the process or is not seen as evidence of bad faith on either side. The fact that there are differing views of the strategic environment and are some strategic divergences should be acknowledged and addressed through the broader strategic dialogue. The concept of maritime partnerships may also provide an opportunity for upward influence on the relationship as a whole, much like with the US maritime strategy on US grand strategy, with maritime cooperative efforts providing information, insights, and lessons that can serve to bolster the overall relationship.

Southeast Asia

For the United States, the relative strategic importance of Southeast Asia has increased in recent years because of China's growing influence in the area and because the sub-region is a frontline in America's global war against terrorism. It is also thought to be prone, especially in view of the 2004 tsunami, to natural disasters. Given geography and the reality of US local capabilities, US strategic interests in Southeast Asia are largely maritime. A Cooperative Strategy for 21st Century Seapower with its focus on global maritime partnerships for local and regional security, the prevention of major power conflicts, and support for humanitarian disaster relief operations appears tailor made for the region. Indeed, it mirrors at the national and interagency level much of what PACOM and the US Pacific Fleet have been doing for a long time.

Although the risk of interstate conflict is relatively low in the region, Southeast Asia is rife with so-called non-traditional security challenges including terrorism and piracy. Parts of several countries have low-grade insurgencies or are just barely under the rule of law by central governments. In this environment, weapons, people, and other contraband flow casually using water including the numerous rivers, protected bays, straits, and littorals in the regions archipelagos and island chains. Since 11 September 2001 the Bush administration has focused on what it perceives as radical Islamic threats to the Philippines, Indonesia, Malaysia, Thailand, and Singapore. Regional experts, however, view Southeast Asia more as being 'more of a transit, support and, facilitation point rather than an operational hub or target in itself in Al Qaeda's strategy'. 62

Moreover Southeast Asia sits astride several of the world's busiest straits and commercial sea lanes; if there ever was a case to be made for so-called strategic chokepoints, it would be here at the cross roads between the world's largest sources of petroleum and the world's largest most import-dependent economies. A large scale terrorist incident or prolonged instability would affect both local economies and the global economy. China, Japan, and South Korea as major exporters (and importers of commodities and energy) all rely on routing products through the Malacca, Lombok, and Sunda straits. As such they have legitimate interest in maritime security in the sub-region.

Indonesia, Malaysia, Singapore and other maritime countries in the region guard their sovereignty and bristle at the suggestion that they are unable to provide sufficient security in the region. In 2005, for example, after Lloyds of London and other major insurers designated the Malacca Strait as a 'risk zone' Malaysia's Deputy Prime Minister Najib Razak reacted angrily and claimed that piracy was down while safety was increasing. Each country has resisted the maritime influence of outside powers from China to Japan to the United States although there is evidence that the United States is sometimes viewed as a regional balancer.

Especially with regard to common interests in fighting terrorism, Southeast Asian countries have been willing to support US regional objectives. In May 2007, for example, Singapore, Malaysia and three other countries joined the United States

for the fifth annual Southeast Asian Cooperation Against Terrorism (SEACAT) exercise. ⁶³ As with the objectives of *A Cooperative Security for 21st Century Seapower*, these Southeast Asian events foster the longer range objectives of increased local knowledge and greater interoperability amongst junior sailors and officers in the US Navy as well as its partners.

One impediment to greater US involvement is that the sub-region is plagued by what one observer has called 'disunity in diversity' in that relatively few successful institutional relationships – from alliances to information sharing organisations – have been established to boost security cooperation. Over three decades ASEAN has made progress, but has not achieved comprehensive regional security, in part because it relies on consensual problem solving, informal relations, and few formal institutions.

US efforts to strengthen collective efforts to improve regional maritime security may be hindered less by politics, the lack of effective regional security institutions or the efforts of outside powers such as Japan and the United States, than by the limited capacities of the local states themselves. As one analyst argues, limited state capabilities have forced commercial firms to turn to private security companies to secure vessels, ports, offshore energy installations and fishing grounds. Despite some capacity building by Malaysia and Singapore, many other regional navies and coast guards have struggled to buy equipment, train and maintain human capital in the wake of the 1997 Asian financial crisis. On the other hand, if capacity building is part of the issue, the US maritime strategy and other path-breaking efforts to shore up regional maritime forces in the Caribbean and the Gulf of Guinea may prove models for Southeast Asia. Already the Pacific Partnership launched on 1 June 2007 is a step in the right direction.⁶⁴ In the Pacific Partnership, the USS *Peleliu* conducted humanitarian operations (largely medical) in the Philippines, Vietnam, Papua New Guinea, the Solomon Islands, and currently the Marshall Islands. US Navy personnel worked with non-governmental organisations including Project Hope, The University of California San Diego, Pre-Dental Societies as well as regional partners such as Australia, Canada, India, Japan, the Republic of Korea, Malaysia, Papua New Guinea, Singapore, Vietnam and New Zealand. Other countries can play similar roles; Australia, for example, has maintained a very successful Pacific Patrol Boat Program for many Pacific Island nations. Perhaps this and other similar efforts could be stepped up either by the United States or in cooperation with US regional allies or partners.

Conclusion

The full impact of *A Cooperative Strategy for 21st Century Seapower*, globally and in the Indo-Pacific region, will not be apparent for several years because time is required for implementation and then assessment. By the time this paper is published the baseline document will still be less than a year old. As can be seen in the brief reviews above, public reaction by key countries in the Indo-Pacific region has been varied both in scope and tone. They too are waiting to see about the details

of implementation, how its implementation relates to other US strategies and initiatives, and indeed whether the strategy is implemented at all. The governments, their maritime Services, and interested analysts of maritime affairs are looking for evidence that implementation will occur and will result in significant changes in, or solidification of, US interests and actions in other spheres of endeavour.

One first piece of evidence on implementation is discussion by US Navy and other senior leadership of how the concepts in the new strategy will be promulgated throughout policy and operational documents that are controlled by the three US maritime Services. 65 In other words, it appears that the new strategy's impact will not be limited just to it appearing in one, fairly short, document. One of the US Navy/US Marine Corps foundational documents, the Naval Operational Concept, is due to be rewritten in the coming year and will be influenced by the new strategy. The Navy Strategic Plan, the guidance to program managers, was recently signed out in classified form, with pieces of it presumably drawn from the strategy. Reportedly, an unclassified version of this program guidance will be released soon, allowing analysis of how much the precepts of the new strategy have found their way into the range of maritime strategy and policy documents that guide the manning, training, and equipping of the maritime Services.⁶⁶ To be successful, the three maritime Services will have to maintain a united conceptual, programatic, and operational front against competing views of the ways in which maritime power should serve US interests.

Success for *A Cooperative Strategy for 21st Century Seapower* will also depend on the attitudes and actions of both key segments of the US Government and international maritime partners. One critical actor is the keeper of the purse, the US Congress. Since the new strategy has yet to be translated into programs or operational concepts, it is not clear yet whether the strategy will require more resources than the current level of funding for the three Services, less, or in somewhat of the same neighbourhood. What is known is that the US defence budget will face significant pressure in the coming years, if not decades, due to expenses accrued during the wars in both Afghanistan and Iraq. For the Congress to fund the strategy, particularly in light of other priorities and pressures, it will have to accept its basic premises and then agree with how those premises play out in the world of domestic constituencies such as ship building interests and competing claims by veterans and the other armed Services.

Finally, more so than any previous US maritime strategy, success for the current version rely on the cooperation of international partners. International cooperation, in turn, will depend on acceptance of several key propositions. First, that they have maritime interests that require protecting or defending in ways that are different than they have been doing so heretofore. Second, that cooperation is a desirable way to enhance or protect their interests in the maritime realm. In other words, that the international partners in question should not either pursue these interests unilaterally or, equally possible, free ride on the efforts of others to protect the global commons, knowing that they will reap the benefits without having to

make any changes in the way their maritime forces operate. As noted above, what the United States is proposing in this new strategy is a potentially different kind of international cooperation that does not necessarily follow old models of alliance or donor/recipient interactions. Third, that the United States is a desirable or even acceptable, partner with whom to cooperate in pursuit of these interests. Finally, there is the question of whether US maritime forces can create an effective and efficient program of maritime partnerships that is both politically acceptable to a wide range of countries with maritime interests and which operationally addresses the range of maritime security challenges.

From a United States perspective, early returns give grounds for cautious optimism. Of the three major powers discussed in this paper, Japan appears largely on board, India is watching and waiting and, China, the sole potential adversary in the region has been restrained in its official response. On the surface, the US strategy meets the geo-political needs of all three powers. US maritime forces, in effect, emphasise collective responsibility for ensuring the security of the maritime commons. They highlight the prevention of war and the importance of maritime security for the peaceful development of all nations rather than warfighting or efforts to isolate individual nations. Most important, the strategy asks others to join it together to ensure the global maritime order. Even if the specific means of cooperation implied by A Cooperative Strategy for 21st Century Seapower may, in some cases (PSI or the global maritime partnership, for example) be less than appealing, the offer to cooperate itself leaves room for negotiation and compromise.

In many respects, China remains the key in the Indo-Pacific region. Its seemingly inexorable economic rise and concomitant drive to acquire military power commensurate with its economic status will shape both Japanese and Indian threat perceptions. Its willingness to join or at least not impede US efforts to implement the concepts underlying A Cooperative Strategy for 21st Century Seapower will help shape the perceptions of future administration and, ultimately, the substance of America's grand strategy to China and the entire region.

PART 3 ~ North Asia

The New Power Balance in East Asia

Robyn Lim

Australia has a vital interest is whether and how the three large players in East Asia - the United States, China and Japan - can balance one another strategically. The United States is the only global power, while the security interests of the other two players are more regionally concentrated.

Australia's alliance with the United States rests on a congruence of strategic interest in seeking a balance of power in North Asia. That has been the vital American interest in the region since the United States took the Philippines in 1898 as a spoil of the naval war with Spain. Often forgotten in Australia is the fact that Australia sought United States strategic protection long before they were willing to provide it. We secured such protection, in the form of the ANZUS Treaty, only because of a timely (albeit limited) commitment to the Korean War.

In the first six months of 1942, with the Imperial Japanese Navy running rampant in the Pacific, Australians learned the truth of what that great Yale Dutchman Nicolas Spykman had said: 'Distance does not protect. There can be security only in balanced power'. Strategic circumstances change, but strategic interests are remarkably enduring.

For the United States now, the biggest problem in East Asia is that Japan and China loathe each other, so the United States has to find a balance between them. If left to their own devices, they are likely to sort out their problems in the most hostile ways. The United States does not want to have to choose between China and Japan, yet it is the only outside power strong enough to keep them from each other's throats.

Thus America has the main task of helping to bring a 'rising' China into the international system, without war but without appeasement either. At the same time, the United States needs to prevent Japan from becoming so insecure that it feels it must look after itself, including possibly with nuclear weapons. This is all much easier said than done, of course.

So it is not 1914 in East Asia - not yet, anyway - but it could become so, if things go wrong.

The problems of security in this region are quite different from those of the Middle East, where anarchy is growing and Israel is the only strong state. The North Asian states are all strong, with much visceral instinct and unresolved historical grievances; plus a myriad of territorial disputes. Japan, for example, has disputes over islands with all its neighbours, including with China over the uninhabited Senkaku/Diaoyutai islands in the East China Sea.

In East Asia, two great changes are working themselves out in complex ways - China's turn to capitalism (with party control) under Deng Xiaoping, and the winning of the Cold War.

Liquidation of the Cold War did not see great power strategic tensions resolved in East Asia, as they were in Europe. To the contrary, tensions among the United States, China and Japan were not resolved, and continue to focus on the Korean peninsula, the Taiwan Strait, and clutch of archipelagos in the East China and South China Sea.

That is an indication of the maritime dimension of security in the western Pacific. Indeed, apart from the Burma-India-China theatre, World War II (WWII) in the Pacific was fought entirely in or over islands (if you count the Malayan campaign as pointed at the capture of Singapore.) Of all the small islands in the western Pacific today, none is of greater strategic importance than Okinawa, Taiwan, Guam and Singapore. And while Diego Garcia is in the Indian Ocean, it is another vital link in the US 'chain of pearls' along the eastern and southern rim of Eurasia.²

The three main players in East Asia have important shared interests. None wants war because none believes that the benefits of war would outweigh the costs. All want stability in the Middle East, which has the largest proven reserves of the oil upon which the economies of the industrialised world depend. Moreover, they all need to keep open the sea lanes from the Arabian Gulf to East Asia.

But the three main players also wish to pursue their interests, and none wants to see others free-riding. So war could come anyway, the ways that wars always dothrough miscalculation when conflicts of strategic interest already exist. Moreover, militaries everywhere, if left to their own devices, are inclined to create 'budgetary enemies' in order to justify weapons acquisition and force structure.

Those who advocate a post 1945 'Franco-German' model for Japan and China fail to understand that their relationship is far more like that between France and Germany post 1918. In Western Europe after 1945, Franco-German rapprochement was central to the success of the European Union and NATO.

In East Asia, things were very different. True, China and Japan were de facto allies during the latter stages of the Cold War, because the United States and China were allies of convenience. But those alignments could not survive the collapse of Soviet power.

Japan, throughout its long history, borrowed much culturally from the Middle Kingdom, but maintained its independence, in a posture best described as 'subtle defiance' on the fringes of the Chinese world. For its part, China is now asserting what it sees as its rightful place in the world, and sees Japan as the worst of all those who preyed on China when it was weak.

Nor was any rapprochement effected between South Korea and Japan during the Cold War, despite unremitting US efforts. South Korea and Japan also have a territorial dispute, over the Tokdo/Takeshima islands in the Korea Strait. 'Regime change' in Seoul in December 2007 brought in Lee Myung Bak as South Korea's president. That will reduce tensions with Japan but will not resolve their territorial dispute.

Thus institutional approaches to security, so beloved by former Australian foreign minister Gareth Evans and others are unlikely to work. To the contrary,

forums such as the East Asia Summit are more likely to provide a venue for China to seek to isolate Japan, and thus increase rather than reduce tensions.

In this region, the consequences of great power tensions are observable in the development of more and better weapons, particularly by the United States and China. Weapons development in itself is not too hard to follow, although dual use technology does make it more difficult. But the consequences of weapons development are much harder to predict, as anyone familiar with the history of the Cold War knows – for example, the unpredictable consequences of Moscow's development of the SS-20 intermediate range missile. When the Soviets developed that missile, they had no idea of what role it would play in helping them lose the Cold War.

It's not entirely true, though tempting, to say that arms control works only when it's not needed. In fact, this region's history includes a relatively successful arms control agreement – the Washington naval agreements of 1921-22, and associated treaties *Washington Naval Treaty 1922*, *London Naval Treaty 1930* and *Second London Treaty 1936*. Among other things, the *Washington Naval Treaty* prevented the

from arms-racing against the Royal Navy, when there was no strategic clash of interest between the two countries.

That is a good demonstration of the risk that even in democracies, military forces are tempted to create 'budgetary enemies'. The *Washington Naval Treaty* also helped bolster the position of the moderates in Japan. But it did not prove sustainable after the onset of the Great Depression, which undermined the liberals in Japan, and helped the militarists gain control. (That example shows also that strategy and economics work together in complex ways.)

Arms control can work only if all parties genuinely want peace, and can agree on what constitutes sufficiency. Currently, China is using 'arms control' for purely political ends, as recommended by Lenin: to lull the democracies into complacency. It is a sad reflection of the neglect of history in our universities that so few in the Australian commentariat seem to understand that, as shown by the response to China's anti-satellite missile test in January 2007.

'Strategic disjuncture' lies at the heart of strategic analysis. Different parties see their interests differently. And their differences arise from different calculus of strategic interest, which no amount of US missionary instinct is going to change. That is because these differences are not based on simple misunderstanding. To the contrary, the problem is often that the parties understand one another only too well.

The United States: Regaining Global Strategic Mobility

Since the end of the Cold War, two US presidents have followed interventionist policies, neither very successfully. While it is impossible at present to predict the outcome of the wars in Iraq and Afghanistan, one thing is clear – the United States global imperative will be to regain the strategic flexibility lost when American ground forces became bogged down there.

Under the next president, the United States will have to rethink the basics of its security policy – where and when to intervene, and on whose behalf.

In the western Pacific, the United States will remain the 'offshore balancer', on the basis of its impregnable position in the Western Hemisphere. Its main purpose in the region is to maintain a balance of power conducive to its interests, and to protect the 'west-about' route to the Middle East.

Since 1950, the United States has chosen to maintain the East Asian balance essentially by means of alliance with Japan. But that was not so in the past, and may not always be so in future. The Unites States vital interest is in the balance per se, not the means of achieving the balance.

Circumstances are now very different from those of the Cold War. That global strategic consequence had its roots in Europe, as a consequence of the way WWII ended, with the Soviets dangerously close to hegemony over Eurasia. Great power tensions in East Asia reflected those generated in Europe after Stalin brought the Cold War to East Asia when he gave Kim Il Sung a green light to invade South Korea in 1950.

Indeed, in the latter stages of the Cold War, the United States was in an almost ideal position in relation to both China and Japan. America was in strategic alignment with both the 'rising power' on the eastern edge of the Eurasian landmass and with the key state on the 'first island chain' – in order to oppose Soviet claims of hegemony over all of Eurasia based on near-hegemony in Europe.

But now great power tensions are indigenous to East Asia. So the three main players have very different configurations of strategic interest.

China: Growing Strategic Ambition

China has been enjoying a strategic latitude unprecedented in modern times because of the collapse of Soviet power on its northern and western frontiers. To the south, Vietnam was deprived of its Soviet protector, forced to withdraw from Cambodia, and then had to accommodate itself to China's rising power.

The liquidation of the Cold War made China the dominant power on the Eurasian landmass, where it can face down any threat of force or invasion. Serious land-based threats to China could come only from Russia or India. For the foreseeable future, neither will be strong enough.

Yet there is no guarantee that China will always be dominant on the Eurasian landmass, not least because of the tendency for others to gang up against the largest threat. China is also facing serious internal problems.

For China, the United States is by far the most serious strategic threat, as it can bring enormous military pressure to bear against China, including from bases in Japan.

Thus it is logical for China to pursue an anti-access strategy based on asymmetrical warfare focused initially on Taiwan, including in relation to space warfare. That asymmetrical approach maximises China's advantages of proximity to the East Asian littoral. Indeed 'by observing the military capabilities China is acquiring and reading its literature, we know that China's leaders are preparing as though they might have to fight the United States'.³

China is asserting its own version of the Monroe Doctrine as the Middle Kingdom reasserting its 'rightful' role in East Asia. The United States, the Chinese think, should be content with domination of the Western Hemisphere and a major role in what goes on in Europe. But no American government is likely to see things this way.

It is important to note, however, that neither China nor the United States considers the other single-mindedly as a threat. Currently, China does not represent a threat to the United States anything like the threat once posed by the Soviet Union, when it possessed vast military power, dominated Eurasia and threatened US allies at both ends.⁴ And in economic terms, China and the United States are like two scorpions in a bottle – neither can sting the other without mortal threat to itself.

Much will depend on whether China can resolve its central dilemma. China is seeking the benefits of capitalism in order to increase its wealth and power, but the communist party has no intention of giving up control. It was logical for Deng Xiaoping to take Singapore as his model of capitalism with party control, not least because he wanted to harness the economic power of the Chinese diaspora. But Singapore is a tiny city state, while China is a huge country of 1.3 billion people. And corruption, almost unknown in Singapore, is the cancer eating China.

And can the Deng model work without Deng himself at the top? He was not only a veteran Long Marcher, but a long-time political commissar. Thus Deng, when he cast China onto its present course in 1978, was able to relegate military modernisation to the last of his four modernisations. And while Deng was Paramount Leader, there was no question that the party was ruling the gun in China. Nor was there any such question posed during the Soviet era, where the Bolshevik revolution occurred before the civil war. (Trotksy, the founder of the Red Army, set up the political commissar system to ensure loyalty to the Communist Party.)

But the party-gun question has been raised now in relation to China because here has been a spate of recent incidents. When China knocked down one of its own satellites in January with a direct ascent missile, for example, China's diplomats were left without instructions for more than a week.

The latest incident involved the USS *Kitty Hawk*, the forward-based US aircraft carrier in the Pacific, based at Yokosuka. In late November 2007, China suddenly rescinded permission for the *Kitty Hawk* battle group to visit Hong Hong for Thanksgiving. The Chinese then relented, but the *Kitty Hawk* returned to Yokosuka.

It did so via the Taiwan Strait, to make the point to China that the United States regards the Taiwan Strait as an international waterway.

Worse, China refused permission for two US minesweepers caught in a storm off Hong Kong to refuel there. The minesweepers were refuelled at sea, and returned safely to their base at Sasebo in western Kyushu. But the incident, by violating basic norms of international behaviour at sea, did much to undermine those at Pacific Command in Honolulu who argue for increased military cooperation with China. Thus it played into the hands of the anti-China crowd at the *Washington Times* – as well as the CNN presenter Lou Dobbs. According to them, China is already the 'Soviet Union', and so needs to be 'contained'.

So 'who rules in Beijing' is a good question, with all the contradictions of the Deng Xiaoping model continuing to work themselves out in various ways. Will the Peoples Liberation Army turn out to have the 'Chinese gambling gene' – wanting too much, too soon? Will it replicate the Kaiser's blunders in Germany, and build a 'risk fleet'? Deng, it will be recalled, played bridge, not poker. But will his successors be so willing to bide their time, building up China's wealth and power in ways that do not encourage others to gang up?

America's ability to influence the course of events in China will be limited. But it has no choice but to encourage the more moderate elements in China, who understand that China needs a peaceful environment in which to develop its wealth and power - while at the same time discouraging disagreeable behaviour, especially towards Japan. This is easier said than done, of course.

Japan: Rising Strategic Anxiety

Japan's 'strategic trajectory' is always a murky topic. The big question about Japan is whether US extended deterrence offers Japan enough security today. To put it another way, can extended deterrence 'work' in a multi-threat security environment?

Extended deterrence formerly protected Japan from the Soviet Union. Throughout the Cold War the Japanese Government believed that if push ever came to shove, the United States would indeed be willing to 'risk New York to save Tokyo'. For its part, the United States was willing to provide nuclear and maritime protection for Japan as long as Japan fulfilled its end of the bargain, which was to provide unimpeded United States access to air and naval bases in Japan, and not oppose US policy on any important security issue.

But that was within a global context in which the United States took a fixed view of the Soviet Union as an enemy, and maintained that view until the Soviet Union collapsed. Today's China is not the Soviet Union and the United States and China are not friends, but are not enemies either.

To satisfy Japan's strategic security requirements today, extended deterrence needs to apply to both China and North Korea. Yet there are signs that it does not, even to North Korea.

As a consequence of North Korea's dangerous nuclear and missile brinkmanship and with China also much in mind, Japan has been demanding a formal US statement

that it would defend Japan against nuclear attack. Yet that assurance should be implicit in the *Treaty of Mutual Cooperation and Security* (between the United States and Japan) 1960.

The United States keeps giving Japan assurances that it can rely on its extended deterrence, but the Japanese keep asking for more specific 'guarantees'. The disappearance from the Bush administration of those such as former Deputy Secretary of State Richard Armitage has made the Japanese even more 'needy'.

The Japanese, who did not have to take any tough decisions on security during the Cold War, do not seem to understand that the United States, not least with Congress in mind, cannot give specific guarantees about what it will do in all circumstances. What if, for example, an extreme right wing government came to power in Japan and provoked the North Koreans and/or China?

In Australia, we have learned that pressing the United States on 'guarantees' is likely to be counterproductive. That is because it invites Washington (with an eye as ever on Congress) to interpret US obligations in the narrowest possible terms. There are no 'guarantees' anyway in international politics. The last time any government gave another a blank cheque was when the Kaiser gave one to Austria-Hungary in the summer of 1914. But the Japanese continue to demand specific 'guarantees' they are not going to get.

To many Americans, it seems illogical that Japan should be more afraid now than it was during the Cold War. After all, there are many fewer and much less capable missiles, now targeted on Japan. What these Americans do not seem to understand is that the US-Japan alliance, and Japan's willingness to rely on the United States 'nuclear umbrella', was based on the fixed enmity between the United States and the Soviet Union. Currently, the US-China relationship is characterised by ambiguity, not fixed enmity.

Moreover, North Korea (taking a leaf out of Mao's old book) deliberately creates the impression of 'irrationality' in order to increase the fear that its missiles and weapons of mass destruction evoke. As the right wing *Sankei Shimbun* newspaper put it in on 5 October 2007, in an article entitled 'Day of nightmare of 'nuclear umbrella' disappearing', 'the North is a dictatorship that has committed illegal acts without mercy, so there is a probability that nuclear deterrence will not function normally with that country, as it did with Russia in the cold-war era'.

This is a classic case of 'strategic disjuncture' between the United States and Japan. The parties simply see their interests differently, on an issue of vital strategic security for Japan. America thinks joint US-Japan missile defence should be enough to meet Japan's needs, since it is non-nuclear and defensive. In Japan, doubts are growing that it will be enough, because of the gradual erosion of the congruence of strategic interest on which the alliance is based.

Thus strategic circumstances have changed in ways that make the United States feel that Japan should contribute more than it has to alliance security, while Japan feels that further effort on its part requires greater recognition by the United States of Japan's distinctive interests.

Difficulties in predicting Japan's likely 'strategic trajectory' are compounded by important cultural elements. Under the surface of apparent harmony, Japan is a fractious country with appalling decision making processes. During the Cold War, the various factions were able to agree on little else but how to maintain as much independence as possible by near-free riding on the United States. The idea that Japan is, or was, a puppet of the United States, cherished by the left in Australia as well as elsewhere, is a myth.

For example, when Japan was handed back responsibility for its air defence in 1964, it chose to remain as 'independent' as it possibly could. If Japan had indeed been a US puppet, there would have been an Asian NATO and Japan's military would be a lot more capable than it is.

Even now, no Japanese leader seems capable of articulating a rationale for the alliance. Most Japanese still think that security problems can either be ignored, or left to the United States to resolve.

Moreover, Japan still maintains the peculiar interpretation of its Constitution, based on a ruling by non-elected bureaucrats that Japan cannot engage in collective self defence, although this is a right of all members of the United Nations under Section 51 of the Charter. Even right wing Prime Minister Shinzo Abe was facing an uphill battle to remove this ruling, and new Prime Minister Yasuo Fukuda will probably not even try. (The ruling Liberal Democratic Party will have problems with the opposition-dominated Upper House for at least three years, and more likely six. There is no mechanism in the constitution, as in Australia, for a double dissolution to resolve a deadlock.)

Currently, differences among the conservatives, papered over at the time of the Korean War, are re-emerging with a vengeance. The conservative *Yomiuri Shimbun* newspaper, for example, argues that Japan can still afford to rely on the United States for its nuclear security, while the *Sankei Shimbun* is openly expressing growing doubts.

If Japan decides it cannot afford to rely on the United States for its strategic security, does it have any choice when it comes to deterrence?

Certainly, Japan would lose a great deal by opting for nuclear weapons, they would be highly contentious at home. Japan's development of nuclear weapons would also roil the region, since Japan (unlike Germany) has proved unable to settle the issues of WWII on terms acceptable to its neighbours. If Japan were to acquire nuclear weapons, South Korea would almost certainly arm against Japan. Indeed, many South Koreans want to inherit North Korea's nuclear program if the peninsula were reunified, and point it at Japan.

But in future, if things go wrong, nuclear weapons could provide the only measure of real independence for Japan. They are called 'the isolationist's dream' for good reason. Indeed, a Gaullist tattoo in Japan has long existed, notably on the part of Shintaro Ishihara, now governor of Tokyo, and a xenophobic nationalist.

For its part, the United States has good reason to try to prevent Japan from striking out on its own. In the postwar period, America's limitation of Japanese independence has acted as a restraining influence. The United States provided strategic security for Japan, while reassuring the rest of the region by cocooning Japanese power.

Currently, an isolated Japan would be much more likely to get into another war with China – not least because such a Japan would present China with a target not currently available. Moreover, an isolated Japan on bad terms with all of its neighbours would be of little value to the United States as a security partner.

Thus the Bush administration, in order to mitigate Japanese feelings of growing isolation and insecurity, encouraged Australia into the security agreement that was signed by John Howard and Shinzo Abe in Tokyo in June 2007. The main strategic purpose of the US-Japan-Australia 'strategic dialogue' was to reduce Japan's impetus towards 'independence'.

But whether America can continue to limit Japanese strategic independence in future is uncertain, given changed circumstances. One of the few things that can be said with certainty is that Japan will continue to hedge, as it did during the Cold War.

Despite what many people seem to think, there is nothing in the Japanese constitution that would prevent Japan from developing nuclear weapons. In addition, Japan not only has the industrial capability to develop nuclear weapons, but has a wide range of experience in developing satellite systems and rockets. This constitutes a 'virtual deterrent'.

In December 2007, Japan's first successful test of its emerging sea-based missile defence system, developed in cooperation with the United States, helped boost confidence that in future Japan will be able to protect itself against North Korea's Nodong missiles. But there are still those in Japan who want to remain as independent of the United States as possible, not least because they fear 'entanglement' with China.

Thus the 'architecture' of missile defence will do much to define the future of the US-Japan alliance. Will Japan agree to seamless connectivity with the United States, or will it start to go its own way?

Seamless connectivity would offer Japan a great deal in terms of synergies with the United States, and containing costs at a time when the defence budget is under great pressure. (Japan has the highest debt to gross domestic product ration of all the developed countries, and it continues to rise.)

But 'seamless connectivity' would also lock Japan into a US global defence system - that would make America's enemies potentially Japan's enemies as well, something Japan deftly avoided during the Cold War. Moreover, the interests of most of the Japanese defence contractors continue to lie in highly-protected (and thus extremely expensive) domestic production. Exports of arms, which would produce economies of scale, remain forbidden and that seems unlikely to change in the near term, not least because of the current procurement scandal.

Japan does now have a defence minister, Shigeru Ishiba, who understands the issues and will not be manipulated by his bureaucrats or the defence contractors.

In the alliance, much attention is focused on the issue of the successor to the US AEGIS system for maritime air and missile defence. It is not yet clear whether Japan and the United States can agree on a joint approach to development of a new generation of maritime radars.

The best one can say is that both the United States and Japan are now testing the alliance to see how much it continues to meet their current strategic needs.

The United States does have the option, not available to it during the Cold War, of balancing from Guam rather than Japan, and leaving Japan to balance Chinese power. Having Japan as a base (a 'big island' strategy) brings America forward into East Asia in ways that would not be possible from Guam (a 'small island' strategy). But it also commits the United States to Japan. That was one thing during the Cold War, and another today.

Leaving Japan to balance Chinese power on its own would not be without risk either, since it would risk Japan's accommodating itself to rising Chinese power. While this danger seems small today, it cannot be entirely discounted.

The ever-shifting great power balance in East Asia also feeds into the regional flashpoints, the most dangerous of which currently are the Korean peninsula and the Taiwan Strait.

Korean Peninsula: The Tangle of Great Power Interests

In geo-strategic terms, the Korean peninsula is a dependency of Manchuria. For good reason, Manchuria was called the 'cockpit of Asia' after the expanding Russian and Japanese empires started to clash there in the late 19th century over the corpse of a China greatly weakened by the encroachments of the Western maritime powers and Russia. Indeed, the old German geopolitikers used to talk about two main 'fracture zones' in the Far East, where empires collided; the other was Afghanistan. Sometimes, nothing seems to change much.

North Korea's nuclear and missile brinkmanship is another product of the winning of the Cold War. The collapse of Soviet power meant that North Korea was the only remaining Stalinist regime, but it was no longer able to play off Moscow against Beijing for its own benefit. Thus North Korea developed nuclear weapons not just as instruments of blackmail, but in order to deter the United States; and everyone else, including Russia and China.

South Korea, whose economy is more than thirty times that of the North, has proved unable to translate that economic victory into political leverage. To the contrary, as we saw with President Roh's visit to North Korea in October 2007, the South has been willing endlessly to appease the North. It does so out of fear of the North's weapons, and fear of the cost of reunification.

China has not been able to control North Korea, or prevent it from acting in ways that injure China's interests, especially in relation to Japan. Nor does China want North Korea to collapse, not least because that could destabilise China's Manchurian frontier. Thus China's key interest is to control any process of reunification of the Korean peninsula.

America can live with that, especially if it means that China remains strong enough to control disagreeable behaviour on the part of a reunified Korea, especially possession of nuclear weapons. Thus America has been content to let China broker the 'six party talks' on North Korea. (Whether this process will lead to the complete 'denuclearisation' of North Korea seems extremely doubtful, but it might well enable the Bush administration to kick the can down the road for the next administration to deal with.)

The wider question is whether the United States can work closely with China on this issue without deepening Japan's strategic anxieties. So far the signs are mixed.

Taiwan: Strategic Island

Security on the Korean peninsula has long been linked to the Taiwan Strait. For example, Mao was poised to take Taiwan in 1950 and thus complete the Chinese Revolution. Fed up with Chiang Kai-shek, who had fled there after losing the civil war in China, the United States was signalling that it did not intend to intervene. Then the outbreak of the Korean War changed all that when President Truman sent the US Navy 7th Fleet into the Taiwan Strait.

After the Korean War ended in stalemate, Taiwan played an important part in the most important strategic shift of the Cold War - the beginning of the Sino-Soviet dispute. During the two US-China Taiwan Strait crises in the 1950s, to China's chagrin, the Soviet Union saw no interest at stake there that justified the risk of nuclear war with the United States.

In the latter stages of the Cold War, the Taiwan issue was subsumed when China and the United States became de facto allies in order to oppose the growing Soviet power that threatened them both. But the Taiwan problem did not simply fade away, as was widely expected at the time. To the contrary, it re-surfaced soon after the end of the Cold War. But it did so with a new and potentially dangerous twist because Taiwan had become a democracy.

The Taiwan issue is closely linked with the legitimacy (or rather the lack of it) of the regime in China. To demand that China give up its claim to Taiwan is to demand that the Communist Party give up its claim to rule China.

America's vital interest in the Taiwan issue is that China should not succeed in taking the recalcitrant island by force or by threat. If that were to happen, Japan's confidence in US strategic protection would be seriously eroded. Thus in order to deter China from trying to take Taiwan by force, the United States needs bases in Okinawa. Both China and the United States are increasing their in-theatre military capabilities, a sign that both mean business.

But the United States also has a vital interest in avoiding an unnecessary war with China. It cannot allow any government in Taiwan, however democratic, to poke China in the eye and expect the United States to keep China on a leash. President Chen Shui-bian, in the dying days of his presidency, is attempting to do precisely

that.⁶ That is yet another illustration of the fact that democracy is no panacea for strategic problems.

Thus official United States policy is to protect Taiwan's de facto, but not de jure independence. All this is covered by the ambiguities of a 'one-China policy' that is so complex that an official explanation takes at least fifteen minutes. Basically, the United States does not challenge China's interpretation of 'one China', but (when pressed) defines its own position as not supporting either 'two Chinas' or 'one China, one Taiwan'. Yet ambiguity has its uses when it allows all sides to save face.

Japan also has many equities in the Taiwan issue, not least because the island occupies a vital position on the first island chain, critical for the defence of Japan's sea routes from the west. Indeed, it was defence of those sea routes against the encroachment of the Western maritime powers that led Meiji Japan to tighten its grip on Okinawa in the late 19th century. Then Japan seized control of Taiwan as a spoil of the 1894-95 naval war with China.

Nor has the Imperial Japanese Navy forgotten the USS *Queenfish* that as part of a US submarine wolf pack operating in the Luzon Strait, sank nearly 41,000 tons of Japanese shipping between August 1943 and April 1944. Currently, Japan is watching with concern as China consolidates its position in the Philippines, which controls the southern shore of the Bashi Channel/Luzon Strait. (China, of course, was the great beneficiary when the Philippines evicted the US Navy from Subic Bay in 1992.)

Moreover, if China were to gain control of Taiwan, its increasingly capable submarines would have easy access to the deep waters of the western Pacific from Taiwan's east coast. China would also then be much better placed to turn the East China Sea into a Chinese lake.

China's military planning in relation to a Taiwan contingency also has to take account of the fact that Japan has the world's second most powerful navy, and has well-established habits of close cooperation with the US Navy. Indeed, during the 'second Cold War' in the early 1980s, Japanese navy pilots flew submarine hunting missions over the Japan Sea, on alternate days with US Navy pilots. Soviet commanders in the Far East had to assume that if push came to shove, Japan would fight whatever the government in Tokyo seemed to be saying. Thus Japan contributed significantly to deterrence of the Soviet Union. And Japan, when it suited its interests to do so, could ignore its own peculiar interpretation of its constitution that says it cannot engage in collective self defence.

Today, China cannot afford to plan Japan out in relation to a Taiwan crisis. Moreover, Japanese and United States aircraft, if able to use Shimoji Island, which has a currently unused civilian airstrip, would be much closer to the Taiwan Strait than they are from the Okinawan 'mainland'.

Yet the Taiwan issue also raises for the United States the risks of entanglement by Japan with China. For example, in June 2007 the Abe Government allowed Taiwan's former president, the very pro-Japanese Lee Teng-hui, to 'pay respects' to his elder brother who is enshrined at the Yasukuni shrine in Tokyo.⁸ Yasukuni, and

its associated museum, is a shrine to the belief that the United States tricked Japan into war in 1941, and then imposed 'victor's justice' on Japan. Especially offensive to Australians is the presence of an engine of the Thai-Burma Railway in the lobby of the museum. There is no reference whatever to the Allied prisoners of war (as well as hundreds of thousands of Asian labourers) who died on that railway. Japan cannot hope for a 'strategic' relationship with Australia when it has prime ministers who insist on visiting Yasukuni.

With Shinzo Abe having fallen from power after less than a year in office, Japan is now in more moderate hands with Yasuo Fukuda as prime minister (who does not visit Yasukuni). Still, the Lee Teng-hui-Yasukuni incident demonstrated the risk that assertive nationalists in Japan will egg on independence advocates in Taiwan. Frank Hsieh, the Democratic Progressive Party (DPP) candidate in Taiwan's March presidential elections, visited Japan in December 2007 and urged Japan to provide Taiwan with 'security guarantees'. Hsieh also made a point of meeting Abe's assertive nationalist foreign minister, Taro Aso.

Abe may be permanently off the scene, but Aso still lurks in the wings. Indeed, he is widely tipped as the most likely successor to Fukuda. Aso is still in denial that his family coal company enslaved Australian prisoners of war during WWII. It was hard to get Australians to swallow the notion that we shared 'common values' with Japan while he was foreign minister.

Outlook

Thus the two 'big questions' of East Asian security are whether China can resolve its central contradiction of trying to reconcile capitalism with party control, and whether Japan will be content to continue to rely on the United States for its strategic security.

The main 'drivers' of strategic change will be the pace and character of weapons development, as well as the prospects of political change in any of the main parties.

In the democracies, political change will come by means of election. Recent 'regime change' in Canberra will make little difference, since Kevin Rudd has emphasised continuity. But South Korea has made an important turn to the right as the result of its presidential election, while Japan may need to have a lower house election soon in order to resolve its political paralysis. Taiwan holds its presidential election in March.

In China, as in increasingly authoritarian Russia, there seems little chance of major change. But change could come quite quickly and dramatically in North Korea, though of course not by means of election. If the Dear Leader were to die or become incapacitated, with the succession still not secure, North Korea could implode because its economy has already collapsed.

Meanwhile, the American presidential election is less than a year away. One of the few things that can be said with certainty is that the next United States administration will need to devote consistent and high level attention to the balance of power in East Asia. Otherwise, this region could start to look more like 1914.

China as a Global Maritime Power: Opportunities and Vulnerabilities

Ian Storey

In 2005 a host of commemorative events were held across the People's Republic of China (PRC) marking the 600th anniversary of the launch of Admiral Zheng He's seven great naval expeditions. These expeditions, which took place between 1405 and 1433, have been credited with extending Imperial China's political, cultural and commercial influence beyond its own shores and into the kingdoms of Southeast Asia, the Indian Ocean region, the Arabian Sea and even Africa. The anniversary not only provided the Chinese with an opportunity to reflect on their short-lived naval hegemony in the early 15th century, but also for the government to showcase their emergence as a major maritime power in the new millennium. That China has become a global maritime power in the 21st century cannot be doubted: the statistics speak for themselves. A mere thirty years after launching an ambitious program of reform and opening up to the outside world, China now possesses the largest number of merchant ships above 1000 gross tons (GT); Shanghai has become the world's busiest port by total cargo volume; 25 years after it established its first container terminal China now boasts six of the busiest such facilities in the world, with Shanghai expected to top the list in 2008; for every two containers shipped across the Pacific today, one belongs to China; 90 per cent of the world's containers are manufactured in China; China's shipbuilding industry is currently ranked third, but is on target to become number one (if it has not already done so); Shanghai is constructing the world's largest shipyard as well as the world's largest deep water port at the mouth of the Yangtze River; China has the most active indigenous warship building program of any country; and, according to the Panama Canal Authority, the PRC was its second biggest customer in 2007, while some estimate that China has already become the biggest user of the Malacca Strait.1

It would not be an exaggeration to state that the maritime domain has become of critical importance to China for continued and sustained economic growth, political stability, reunification with Taiwan, national security and defence, as well as its great power aspirations. The purpose of this paper is to explore the opportunities and vulnerabilities the sea provides to China. It begins with a review of how China's economic growth has impacted the global economy and shipping industry, and how, in turn, China's future development has become dependent on continued access to the world's oceans. It then moves on to provide a brief overview of the drivers and enablers underpinning the transformation of the People's Liberation Army Navy (PLAN) over the past two decades, and its gradual emergence as a more credible regional force. Finally, the paper assesses China's perceived strategic

vulnerabilities associated with the maritime arena, and the policies and strategies China is pursuing to reduce them.

The Maritime Domain and China's Economic Growth

It is estimated that more than 95 per cent of world trade is conducted by sea. It should come as no surprise, therefore, that the expansion of the global economy over the past decade and a half has led to a massive increase in the volume of seaborne trade: in 2005, 7.12 billion tons of goods were moved by sea, up from 6.27 billion tons in 2000 and 2.6 billion in 1970.² Demand for vessels of all kinds to move these goods has risen accordingly, and in 2005 the world merchant fleet grew by 7.2 per cent over the previous year to reach 960 million deadweight tons (DWT), the highest increase since 1989.³ In 2005 the world's oil tanker fleet expanded by 5.4 per cent, the dry bulk carrier fleet by 7.9 per cent and the liquefied natural gas (LNG) fleet by 7.5 per cent.⁴ The overwhelming bulk of today's manufactured goods are carried in container ships and in 2005 the size of the world's container fleet grew by an impressive 13.3 per cent: world container port traffic increased by 12.6 per cent in 2004 to reach 336.9 million twenty-feet equivalent units (TEUs).⁵

The dynamic economies of Asia have accounted for much of this growth in seaborne trade; Asia took the lion's share with 38.8 per cent, followed by the Americas (22.1 per cent), Europe (21.8 per cent), Oceania (8.8 per cent) and Africa (8.5 per cent).⁶ Asia, and particularly China's, dominance of the world's manufacturing industry has resulted in a severe imbalance in the flow of container traffic from Asia to North America and Europe. In 2005 18.1 million TEUs crossed the Pacific: 13.8 million eastbound from Asia to North America, but only 4.3 million westbound. This imbalance has led to the problem of 'empties': for very 100 containers that crossed the Pacific from Asia to North America in 2005, 60 returned empty.⁷ A decade ago, the Asia-North America container trade was roughly in equilibrium.⁸ The imbalance on the Asia to Europe was not quite as severe, but also cause for concern: 10 million TEUs from Asia to Europe, but only 5.7 million moving in the other direction.⁹

China's phenomenal double-digit economic growth since the early 1980s has been a major, if not the primary, driver of maritime trade expansion. The global shipping industry has struggled to keep pace with growing demand for vessels to carry raw materials and commodities into China, and transport Chinese-manufactured goods to overseas markets. China's economic expansion has impacted the global shipping industry. In 2005, for instance, the volume of China's exports grew by a staggering 25 per cent, while imports registered an 11.5 per cent increase: the figures for North America were 6 and 6.5 per cent respectively, and for the European Union an unimpressive 3.5 and 2.5 per cent. To fuel its rapid industrialisation, in 2005 China imported 263 million tons of iron ore, 50 million tons more than the year before (in the same year Japan imported 135.7 million tons and the European Union 117.6 million).

China's rising volume of imports and exports has necessitated a major expansion in the country's port facilities. As shown in Table 1, of the top 20 ports

measured by total cargo volume in 2005, nine were located in China. In that year Shanghai became the world's busiest port, handling 443 million tons of cargo, a 16.9 per cent increase on the previous year. In 2006, Shanghai increased its lead by handling 530 million tons. 12 Figures for container traffic are particularly striking. Of the busiest 20 container terminals, seven were located in China (including Hong Kong), up from five in 2002.

Rank	Port	Country	Tons
1	Shanghai	PRC	443.0
2	Singapore	Singapore	423.3
3	Rotterdam	Netherlands	376.6
4	Ningbo	PRC	272.4
5	Tianjin	PRC	245.1
6	Guangzhou	PRC	241.7
7	Hong Kong	PRC	230.1
8	Busan	South Korea	217.2
9	South Louisiana	USA	192.5
10	Houston	USA	187.1
11	Nagoya	Japan	187.1
12	Qingdao	PRC	184.3
13	Kwangyang	South Korea	177.5
14	Dalian	PRC	176.8
15	Qinhuangdao	PRC	167.5
16	Chiba	Japan	165.7
17	Antwerp	Belgium	160.1
18	Shenzhen	PRC	153.9
19	New York/New Jersey	USA	138.0
20	Kaohsiung	Taiwan	137.9

Table 1: World port rankings by total cargo volume, 2005 (millions of tons)¹⁶

As shown in Table 2, the six container ports located on the Chinese mainland (Shanghai, Shenzhen, Qingdao, Ningbo, Tianjin and Guangzhou) registered the highest growth rates among all 20 ports and in 2005 together handled 55.28 million TEUs. In 2006 it was reported that all of the ports in China handled 93 million TEUs; more than any other country. According to China's state media, in terms of container traffic, Shanghai knocked Hong Kong into the number three position in the first quarter of 2007, and is set to overtake Singapore in 2008. If In 2005 Chinese ports handled 47 per cent of world container throughput. 15

Port	Country	TEUs 2005	TEUs 2004	% Change 2004-05
Singapore	Singapore	23.19	21.33	8.72
Hong Kong	PRC	22.43	21.93	2.28
Shanghai	PRC	18.04	14.57	23.82
Shenzhen	PRC	16.20	13.65	18.68
Busan	South Korea	11.84	11.43	3.59
Kaoshiung	Taiwan	9.47	9.71	-2.47
Rotterdam	Netherlands	9.30	8.30	12.05
Hamburg	Germany	8.05	7.03	14.51
Dubai	UAE	7.62	6.43	18.51
Los Angeles	USA	7.48	7.32	2.19
Long Beach	USA	6.71	5.78	16.09
Antwerp	Belgium	6.48	6.06	6.93
Qingdao	PRC	6.31	5.14	22.76
Port Klang	Malaysia	5.54	5.24	5.73
Ningbo	PRC	5.19	4.00	29.75
Tianjin	PRC	4.81	3.81	26.25
New York	USA	4.80	4.45	7.87
Guangzhou	PRC	4.68	3.31	41.39
Tanjung Pelepas	Indonesia	4.17	4.02	3.73
Laem Chabang	Thailand	3.18	3.62	5.25

Table 2: Top 20 container terminals by throughput, 2004-05 (million TEUs)¹⁷

Commensurate with its growing economic clout, China has also become a major ship owner. As of 1 January 2006, 35 countries and territories between them owned 95 per cent of the world's merchant fleet: China possessed the largest fleet of merchant ships, with 1763 vessels flying the Chinese flag. However, China drops into fourth place with 7.2 per cent of total DWT (2893 vessels) when both national flag and foreign flags are included, behind Greece (18.02 per cent, 3027 vessels), Japan (14.52 per cent, 3091 vessels), and Germany (7.89 per cent, 2786 vessels). Nevertheless, if Hong Kong is thrown into the mix (4.84 per cent, 663 vessels), China moves up into third place.

China's shipbuilding industry has also become a force to be reckoned with. In 2006 China had held the position of the world's third largest shipbuilder for 12 consecutive years with 20 per cent of global market share (up from 6 per cent in 2000) behind South Korea (35 per cent) and Japan (32 per cent). As shown in Table 3, production at Chinese shipyards has increased significantly since 1998. And according to data compiled by Clarkson Plc, the world's largest shipbroker,

China surpassed South Korea in 2007 to become the world's largest shipbuilder: Chinese shipbuilders booked orders for 103.6 million DWT compared to South Korea's 94.8 million.²⁰ However, China remained behind South Korea in new orders in terms of compensated gross tonnage (the measure that accounts for ship size, the time required and materials used in production).²¹

Country	Year	No. of Ships	Millions of Gross
-		Ordered	Tons
South Korea	1998	337	20.27
	1999	377	22.61
	2000	513	30.52
	2001	497	30.25
	2002	473	27.52
	2003	801	45.64
	2004	1035	55.83
	2005	1143	59.96
	2006	1451	79.21
Japan	1998	490	19.65
	1999	420	17.37
	2000	477	1810
	2001	477	20.73
	2002	579	23.99
	2003	853	35.96
	2004	1108	51.17
	2005	1235	53.91
	2006	1404	60.28
China	1998	185	2.37
	1999	235	4.17
	2000	293	5.19
	2001	340	7.41
	2002	373	9.19
	2003	575	15.95
	2004	860	22.38
	2005	1122	27.39
	2006	1893	48.15

Table 3: Shipbuilding statistics for South Korea, Japan and China²²

Traditionally Chinese shipyards have concentrated on building conventional, low-technology bulk carriers and small crude oil tankers. Today, however, Chinese shipyards are designing and building high-value, technologically sophisticated vessels such as very large crude carriers (VLCCs, vessels above 200,000 DWT), LNG carriers and large high-speed container vessels. Although both South Korean and Japanese shipbuilders still have the technological edge over Chinese yards, China is fast catching up. For example, in September 2007 the Hudong-Zhonghua Shipbuilding Group delivered the first of five 8530-TEU container ships to China Shipping Container Lines (CSCL), becoming one of only four countries able to design and build such larger container ships.²³ Shipbuilding has become a lucrative business in China. In the first half of 2006 China exported US\$3.4 billion worth of vessels, an increase of 66.8 per cent year-on-year.²⁴ For the whole year, the industry's profits doubled to reach a record high of US\$1.3 billion, more than the combined profits of the previous five years.²⁵

Due to low labour costs, the availability of cheap land along China's expansive coastline and improving construction standards, Korean and Japanese shipbuilders are increasingly facing stiff competition from their Chinese counterparts. And the industry has ambitious expansion plans. The Chinese Government's 11th Five Year Plan for the period 2006-10 calls on the country's shipbuilding industry to expand its capacity and construct 300,000-ton VLCCs, 10,000-TEU container ships and large LNG carriers. By 2010, the plan envisages that China will be producing one quarter of all new ships.²⁶ The China Association of National Shipbuilding Industry estimates the country's shipbuilding capacity will exceed 40 million DWT by 2010, up from 14.6 million in 2006.²⁷ As part of this massive expansion, in 2005 work began on the world's largest shipyard on Changxing Island in the Yangtze River north of Shanghai. The US\$3.6 billion, 5-mile long facility belonging to the Jiangnan Shipyard Corporation (which will move from its current site on the Huangpu River), a subsidiary of the state-owned China State Shipbuilding Corporation (CSSC), will be able to produce 4.5 million DWT alone by 2010.²⁸ At least seven Chinese shipbuilders, including state-owned CSSC and China Shipbuilding Industry Corporation (CSIC), which together produce three-fifths of China's current output, are considering share offerings as a way of raising equity to fund expansion plans.²⁹

To summarise, China's dynamic economic growth has spurred demand in the global shipping industry, made Chinese ports among some of the busiest in the world, and set the country's shipbuilding industry on the path to primacy. In short, within a relatively short space of time, China has transformed itself into a major commercial maritime power.

China's Emergence as a Regional Naval Power

A central element of China's recent emergence as a major maritime power has been the transformation of its navy from an antiquated coastal defence fleet into a more credible regional force. Efforts to modernise China's military forces as a whole began under Premier Deng Xiaoping in the early 1980s, a policy response to the People's Liberation Army's (PLA) lacklustre performance against the Vietnamese armed forces in the brief border war of 1979, and the modernisation programs of armed forces around the region. Military modernisation was, however, accorded a low priority by the central government, and throughout the 1980s the PLA remained a large, but ill-equipped land-oriented force incapable of even limited power projection. The army remained the senior Service in every sense of the phrase. The end of the Cold War changed the tempo of military modernisation. Three primary drivers were at work. First, China's shift in strategic focus from countering the threat posed by the Soviet Union in the north to the need to protect maritime resources and defend territorial claims in the south and southeast, such as the South China Sea, East China Sea and Taiwan. This shift partly came about because in 1992 China ratified the United Nations Convention on the Law of the Sea 1982 (LOSC) which allows countries to project a 200 nautical mile Exclusive Economic Zone (EEZ). China also became more eager to exploit oil and gas reserves in the disputed South China Sea. Second, tremendous advances in military technology in the West - as demonstrated in the 1990-91 Gulf War - left the PLA's inventory looking more obsolete than ever. And third, Taiwan's drift towards independence in the mid-1990s. The enablers which allowed China to step up its military modernisation a few gears included greater financial resources for defence spending generated by a decade of sustained economic growth, together with the availability of high-technology weapon systems from China's erstwhile enemy Russia. Since 1990, the Chinese Government has increased defence outlay by double-digit figures every year. The latest increase, 17.8 per cent in March 2007, brought official defence expenditure to US\$49 billion, though most analysts believe the true amount is at least two or three times the stated figure.30

All branches of China's armed forces have benefited from the Chinese Government's shifting threat perceptions and consequent re-ordering of strategic priorities, but perhaps none more so than the PLAN. From the foundation of the PRC in 1949 and throughout the Cold War, the PLAN mission was primarily coastal defence. Post-Cold War, it was assigned new missions: assisting in the goal of national reunification; protecting the country's offshore resources, such as fisheries, oil and gas; enforcing irredentist claims in the South China Sea; and extending China's influence into the oceans beyond. Consensus exists among those who study the PLAN that national reunification, the Taiwan issue, has been the primary driver of China's naval modernisation. The 1996 Taiwan Strait crisis, during which the United States dispatched two aircraft carrier battle groups to the vicinity as a warning to China, highlighted PLAN impotence in the face of US preponderant military power at sea, a humiliating weakness China was determined to correct. As a consequence, PLAN primary missions today centre on conflict scenarios in the Taiwan Strait: delaying and ultimately preventing US naval forces, especially aircraft carriers, from entering the East China Sea to intervene on Taiwan's behalf, imposing a naval blockade around the island, and conducting amphibious landing operations in support of a seaborne invasion.

Even if the Taiwan problem were resolved in the near future, however, the modernisation of the PLAN would unquestionably continue apace. As noted above, in addition to Taiwan contingencies, its mission includes the protection of the country's offshore economic interests as well enforcing its territorial claims, missions that are not mutually exclusive. Although interstate tensions over competing sovereignty claims in the Spratly Islands have eased considerably compared to a decade ago - thanks mainly to China's less assertive policy in the area and the Declaration of Conduct in the South China Sea 2002 signed between the PRC and the ten members of the ASEAN, aimed at freezing the status quo and encouraging cooperative confidence building measures³¹ - the dispute is far from resolved and is still subject to periodic verbal flare-ups. Moreover, the Spratly Islands is not the only maritime dispute to which China is a party. China and Japan have overlapping boundary claims in the East China Sea, and the presence of Chinese drilling rigs near the disputed median line exacerbated the poor state of bilateral relations under Japanese Prime Minister Junichiro Koizumi. A third reason underpinning China's naval modernisation well into the 21st century will be sea lines of communication (SLOC) security. Until recently this was not a major concern, but as the country's dependence on overseas markets, raw materials and energy resources has grown, SLOC security has become a more prominent concern. The issue of SLOC security will be explored in greater depth in a subsequent section.

Conflict scenarios in the Taiwan Strait have led China's senior naval leaders to prioritise the modernisation of its submarine fleet. Submarines are seen as the most cost-effective, versatile and capable vessels to fulfil the navy's operational goals in a cross-straits conflict, namely blockade and sea denial. Since the mid-1990s the PLAN has inducted 12 advanced diesel-electric *Kilo* class submarines from Russia. In addition, Chinese shipyards have been engaged in an ambitious program to build four classes of indigenous submarines: the *Jin* class nuclear powered ballistic missile submarine, the *Shang* class nuclear powered attack submarine, and two classes of non-nuclear attack vessels, *Yuan* and *Song*. ³² The PLAN has been commissioning one to three new submarines every year since 1995, ³³ and analysts expect that by the beginning of 2008 it will possess 28 *Shang*, *Kilo*, *Yuan* and *Song* class submarines, in addition to a larger number of older vessels. ³⁴

The navy's surface fleet has also undergone a major upgrade over the past decade. The PLAN has taken delivery of four Russian-built *Sovremmeny* class destroyers, designed by Soviet naval architects to destroy US aircraft carriers. China has also deployed a total of nine new classes of indigenously built destroyers and frigates, some of which incorporate stealth-like technology. In addition to inducting new weapons platforms, the PLAN has also focused considerable attention on enhancing professionalism within the Service, especially education and training for naval personnel, joint operations with its sister Services, conducting more realistic exercises at sea, and improving logistical support.

Analysts agree, however, that despite undergoing nearly two decades of modernisation the PLAN continues to suffer from significant limitations and

weaknesses. These include limited capacity to conduct operations far removed from the Chinese mainland, joint training and operations, command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR), anti-air warfare and anti-submarine warfare capabilities, and amphibious lift.35 Moreover, despite major advances in design and construction techniques, Chinese naval shipbuilding still lags behind its Western, Russian and Japanese counterparts, and is still dependent on imports of foreign technology.³⁶ In short, the PLAN is still a long way behind its US counterpart, so much so that one independent study concludes that the balance between United States and Chinese naval forces is likely to remain in America's favour 'beyond the next twenty years'.³⁷ Nevertheless, it is equally important not to underestimate how far the PLAN has progressed, and where it's present trajectory is taking it. In the 2010-20 timeframe the PLAN will likely be able to deploy a fleet of 30-40 modern, quiet, nuclear and non-nuclear attack submarines, and a larger number of relatively advanced and well-armed destroyers, frigates, amphibious landing ships, supply vessels and fast attack craft, making it a potent regional force. By mid-century, China may well have become Asia's predominant naval power.

Assessing China's Maritime Vulnerabilities

As demonstrated earlier in this paper, China's economic growth has stimulated world trade and the global shipping industry, but this growth in turn has only been made possible by its use of the maritime domain. In a very real sense, China's continued economic development - which is closely tied to regime survival - and hence their great power aspirations, has become dependent on unimpeded access to the sea. Dependencies of any kind create vulnerabilities, and over the past few years China's political leadership, as well as security analysts, have expressed growing concern at perceived maritime vulnerabilities.

China's anxiety can be broken down into three inter-related concerns. First and foremost, strategic thinkers in China recognise the nexus between future economic development and the uninterrupted flow of energy resources and other commodities into the country. Because the PLAN is currently incapable of protecting the country's SLOCs, especially from the Middle East to China, there is concern that during times of crisis these vital lifelines could be constrained or even severed by its opponents. Second, although China currently owns the largest fleet of merchant ships, 90 per cent of the country's oil imports are transported in foreign owned ships. In times of war, China would be dependent on foreign owned vessels for its energy security, a situation which poses a major strategic vulnerability. The third concern centres on the potential for non-traditional security threats such as piracy or maritime terrorism to disrupt international shipping lanes, especially in strategic chokepoints such as the Malacca Strait. This concern is not as great as the first two, but nevertheless has led China to take a keener interest in security and safety issues in Southeast Asia.

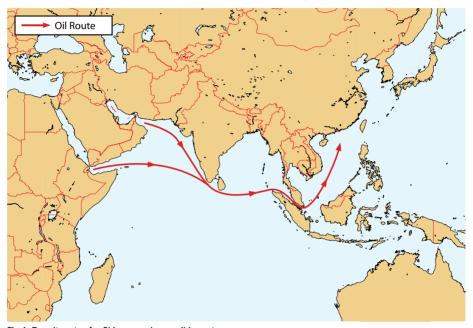
It should be stressed that SLOC security in no way dominates the national security debate in China today. The issue barely rates a mention in China's 2006 *Defence White Paper*. Moreover, PLAN expert Bernard Cole has remarked that the problem of SLOC security is 'ill-defined' in Chinese military writings, suggesting it has not received a high priority. Yet China's strategic thinkers are paying closer attention to the issue, and how it might be addressed. The US Department of Defense has noted this trend, pointing out that access to overseas markets and natural resources have become 'a more urgent influence on China's strategic behavior'. Concern over maritime vulnerabilities has been expressed by Chinese writers in journals and in the state media. It remains difficult to assess, however, how accurately their comments reflect strategic thinking as a whole in China and the extent of their influence.

Liu Xuecheng, a Senior Fellow at the China Institute for International Relations, has written that the problem of 'vulnerable sea lanes' has helped shape China's growing sense of energy insecurity, particularly as ships carrying oil supplies to China must pass through the Strait of Hormuz and the Malacca Strait.⁴¹ A common theme in Chinese commentaries on maritime security is that the world's chokepoints are 'controlled' by the United States and its allies. Zhang Wenmu, a Professor at the Center for Strategic Studies in Beijing, has argued that a stable supply of energy – which must pass through these chokepoints – is critical to China's future economic well-being, and that to secure this future it is necessary for China to possess a powerful navy to protect its SLOCs.⁴² Zhang also contends that the failure to resolve the Taiwan problem can be put down to China's lack of naval power. James Holmes and Toshi Yoshihara have concluded, based on Chinese-language articles on maritime security that Mahanian views of sea power are increasingly coming to the fore in China.⁴³

Concern over SLOC security has mounted in recent years because of China's growing dependence on foreign oil. In 1993 China moved from being a net exporter of oil to a net importer. Since then, its thirst for energy resources has grown exponentially. In 2005 China became the second largest energy consumer and the third largest energy importer. According to the International Atomic Energy Agency (IAEA), China is set to overtake the United States as the world's largest energy consumer around 2010.⁴⁴ Imports of crude oil have risen from 20 million tons in 1996 to 145 million tons in 2006, and are estimated to hit 160 million tons by the end of 2007.⁴⁵ Conservative estimates put China's oil imports at 250-300 million tons per annum by 2020.⁴⁶ In 2006 China imported approximately 43 per cent of its oil needs: by 2008 this dependency is predicted to rise to 50 per cent, and 60 per cent by 2020.⁴⁷

As China's energy demands have spiralled, its dependence on supplies from the Middle East has deepened: today, approximately 58 per cent of China's crude oil imports originate in the Middle East and by 2015 this figure is expected to rise to 70-75 per cent. Energy supplies from the Middle East embark on a 10,000 km journey to China on SLOCs that begin in the Red Sea and Arabian Gulf, flow through

the Arabian Sea, head south past Sri Lanka, across the India Ocean, on through the maritime chokepoints of Southeast Asia (the Malacca, Sunda or Lombok-Makkasar straits), and finally northwards through the South China Sea and into Chinese ports.



Flg 1: Transit routes for Chinese seaborne oil imports

Chinese and Western analysts are unanimous in their assessment that the PLAN is incapable of protecting these long energy supply lines. Zhang Wenmu has bluntly stated that 'China is almost helpless to protect its overseas oil import routes',⁴⁸ while Liu Jiangping and Feng Xianhui have argued:

China is unable to ensure the security of the sea routes that it must use... Due to the fact that there is at present a huge discrepancy in the size, strength and technology of the Chinese Navy compared with many other countries, China's sea routes are at very great risk of being cut at any time.⁴⁹

According to the United States, 'At present, China can neither protect its foreign energy supplies nor the routes on which they travel, including the Strait of Malacca through which some 80 percent of China's crude oil imports transit', ⁵⁰ while Cole assesses that 'The PLAN is not capable of maintaining an even presence, let alone control, along such widely flung SLOCs'. ⁵¹ Zhang Wenmu points out that the PLAN's inability to protect the country's SLOCs raises the possibility of a foreign-imposed embargo on China, possibly during a conflict in the Taiwan Strait involving the United States. ⁵²

Emblematic of China's growing concerns over SLOC security is the Malacca Strait, the 550-mile long stretch of water separating the Indonesian island of Sumatra and the Malay peninsular, with Singapore located at its southern tip. The strait, the shortest direct route between the Indian and Pacific oceans, is used by over 60,000 vessels per year, and has long been regarded as one of the world's most important strategic waterways.⁵³ In early 2004 it was reported by Hong Kong's pro-Chinese government newspaper Wen Wei Po that at the closing session of an economic conference in Beijing in November 2003, Chinese President Hu Jintao had expressed serious concern at the country's energy security situation. Hu pointed out that four-fifths of China's crude oil imports passed through the Malacca Strait and that because 'certain major powers' (a codeword for the United States and its allies) were attempting to control the strait this posed a serious strategic vulnerability for China. To address the problem, Hu called for new strategies to enhance the country's energy security.⁵⁴ The state-run media labelled the problem China's 'Malacca dilemma', and some commentaries addressing the issue bordered on the paranoiac. In June 2004, for instance, the China Youth Daily warned

It is no exaggeration to say that whoever controls the Straits of Malacca will also have a stranglehold on the energy route of China. Excessive reliance on this Strait has brought an important potential threat to China's energy security'.⁵⁵

The article went on to argue that the real purpose of the 2004 US-proposed Regional Maritime Security Initiative (RMSI) was not to fight transnational threats in Southeast Asia but to exert greater control over the Malacca Strait, and thereby control the flow of global energy supplies to 'restrict the rise of major powers', such as China.⁵⁶ In March 2005, shortly after the United States announced it would restore military aid to the Indonesian Armed Forces under the International Military Education Training (IMET) program, a commentary in the Chinese periodical *International Herald Leader* implied that US-Indonesia military cooperation was directed at China and, in particular, establishing US control over the Strait, 'China's most important oil lifeline'.⁵⁷

Chinese security analysts are not only distrustful of US intentions towards the Malacca Strait, but also Japan's. In December 2004, a Chinese newspaper commentary accused Japan of using the threat of piracy in the Malacca Strait as a pretext to increase its naval activity in the area. The commentary quoted Chinese security experts as saying that Tokyo's real reason for stepping-up anti-piracy cooperation with certain Southeast Asian countries was to protect its SLOCs (90 per cent of Japanese oil imports pass through the Malacca Strait) and extend its military power further into Asia. ⁵⁸

Addressing China's Maritime Vulnerabilities

Addressing the vulnerabilities associated with SLOC security is closely tied to enhancing China's overall energy security situation. This is an area of national security which the Chinese Government has been paying serious attention to over the past few years as evinced by the establishment of a State Energy Leading Group headed by Prime Minister Wen Jiabao within the State Council, to identify long-term strategies to improve the country's energy security. China's overall strategy is to reduce the country's growing dependence on energy imports, particularly crude oil, through domestic initiatives. These include, inter alia: continued reliance on coal as the country's primary energy source (China is the largest producer and consumer of coal); increasing nuclear power generation capacity; improving energy efficiency; enhancing domestic oil and gas exploration and developmental activities; and greater use of renewable energy sources such as solar, wind and hydroelectric power.⁵⁹ In addition, China's 10th Five Year Plan for 2001-05 mandated the establishment of Strategic Petroleum Stockpiles (SPS) to ensure a limited measure of petroleum supply security in times of crisis. Four SPS facilities, in Zhenhai, Aoshao, Huangdo and Dalian, began operation in early 2007 and are designed to store approximately 30 days of oil imports by 2010.60 By establishing SPS facilities, China is simply following in the footsteps of other countries which import large amounts of energy resources and maintain strategic oil reserves; the United States, for instance, stores 60 days of oil imports while resource-poor Japan has 160 days supply. 61

These initiatives will undoubtedly go some way towards helping China improve its energy security situation. However, such programs will take decades to bear fruit, and in any case it will be virtually impossible for China to become totally self-sufficient in energy resources. As a result, China's dependence on imported energy resources is a permanent reality. This means SLOC security will continue to weigh on the minds of Chinese security planners for the foreseeable future. The following sections explore some of the options available to the Chinese Government.

NAVAL POWER AND SEA LINES OF COMMUNICATION SECURITY

Comprehensive SLOC security for China ultimately rests on the possession of strong naval forces. Arriving at that destination will be a long-term process for China. The Chinese Government itself considers its military modernisation program will take more than a generation to complete. The 2006 *Defence White Paper* envisages a three-step, evolutionary process: establishing a 'solid foundation' by 2010, achieving 'major progress' by 2020, and ultimately 'being capable of winning informationalized wars' by around 2050.⁶² At present, the PLAN would find it operationally very challenging to exercise even limited SLOC control in a crisis, especially if it were already engaged in a naval blockade of Taiwan and amphibious landings on the island. China's 'protection' of its SLOCs would be limited to PLAN submarines targeting enemy surface warships.⁶³ However, China's submarine inventory is quite

limited, and the PLAN would be stretched to provide both SLOC security and seadenial capabilities.

It has been suggested that the PLAN's lack of organic airpower to protect its surface ships has provided a powerful impetus for the acquisition of aircraft carrier battle groups. ⁶⁴ China's naval chiefs have been interested in the aircraft carrier option since at least the early 1980s when feasibility studies were commissioned and China purchased the 15,000-ton aircraft carrier HMAS *Melbourne* from Australia and used its flight deck for pilot training. In the 1990s Chinese-based companies, some with links to the PLA, purchased three decommissioned Soviet-era aircraft carriers: the 40,000-ton *Minsk* and *Kiev*, and the 67,000-ton *Varyag*, all of which were believed to have been examined by Chinese naval architects. ⁶⁵ There have also been numerous, but unsubstantiated, press reports over the years that China intends to build an indigenous class of aircraft carriers, variously described as at 20,000, 48,000 or 93,000-tons. ⁶⁶

Recent statements in the press by Chinese officials associated with the Commission of Science, Technology and Industry for National Defence, have led to renewed speculation concerning China's aircraft carrier ambitions. In March 2006 Lieutenant General Wang Zhiyuan declared in a press interview that acquiring aircraft carriers to protect the country's maritime interests was an 'absolute necessity' and that the PLA would 'conduct research and build aircraft carriers of its own, and develop its own carrier fleet', adding that the PLAN already possessed the necessary escort vessels.⁶⁷ His comments were followed by Sun Laiyan, the Vice Minister of the Commission, who remarked that China would 'gradually possess capabilities for manufacturing aircraft carriers', while in January 2007 a spokesman said China already had the technical expertise to build a carrier but that no timetable for a construction program existed.⁶⁸ Reports have also surfaced claiming that the Varyag has undergone limited refurbishment in a Chinese dockyard and may be used as a training vessel.⁶⁹ SLOC security provides a powerful justification for China to acquire aircraft carrier capability, but despite recent speculation there is no firm evidence that China is about to begin a construction program any time soon.

Access to overseas naval bases has been suggested as another avenue China is exploring in an attempt to improve sea lane security. According to this thesis, China has been cultivating strategic relationships with a number of countries in Asia with a view to establishing a naval presence along its energy supply SLOCs. This so-called 'string of pearls' strategy involves China gaining access to naval facilities or commercial ports in Bangladesh, Burma, Pakistan, Sri Lanka and Cambodia, countries that occupy strategically important positions along China's energy SLOCs. The outline of this strategy was reportedly contained in a report prepared by US defence consultant Booz Allen Hamilton for the US Department of Defense and was based on the fact that Beijing has been cultivating close relations with the aforementioned countries and that at least in the case of Pakistan, Burma and Cambodia has been heavily involved in the financing of new naval facilities and the upgrading of old ones. China has invested in these projects, so the argument runs,

so that during times of crisis the PLAN can make use of them, a variation on the US Navy's 'places not bases' strategy.

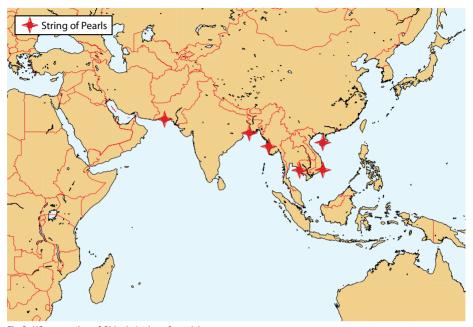


Fig 2: US conception of China's 'string of pearls'

While the concept has a certain logic, it suffers from three major flaws. First, at least as far as this author is able to discern, no strategy resembling a 'string of pearls' has ever appeared in the discourse of Chinese security analysts. Second, China's involvement in these projects has been limited to a commercial role and thus far not a single PLAN vessel has docked at any of these facilities, let alone made use of them on a regular basis. Third, in recent times the Chinese Government has eschewed the idea of stationing PLA forces overseas. However, Beijing could change position on this issue, and an overseas presence by the PLA would not be without precedent.⁷¹

BUILDING STRATEGIC INDUSTRIES AND A STRATEGIC TRANSPORTATION SYSTEM

The second aspect of vulnerability associated with SLOC security is the transportation of China's energy resources by foreign owned vessels. China currently imports approximately half of its oil needs, of which 90 per cent is transported by foreign tankers – a proportion that is often contrasted with Japan, which imports 80 per cent of its energy needs using Japanese owned vessels. In times of crisis China would be reliant on foreign owned ships for its supply of crude oil, and foreign ship owners would be reluctant to send their vessels into a conflict zone. In an attempt to overcome this vulnerability, the Chinese Government has adopted two policies. The first has been to declare shipbuilding a strategically important industry to remain

under state control, along with armaments, power generation and distribution, oil and petrochemicals, telecommunications and coal. Chairman of the State Assets Supervision and Administration Commission, the body which oversees China's state-owned enterprises, Li Rongrong has described these industries as 'vital arteries of the national economy and essential to national security'. Shipbuilding has been declared a strategic industry not only because of the growing need for vessels of all kinds, but also because warship building is imbedded within the national shipbuilding industry.

The second policy is to create a strategic transport system by increasing the number of supertankers under the control of China's state-owned shipping companies. According to one report, current plans call for a fleet of 90 VLCCs by 2015 capable of transporting 50 per cent of the country's oil needs.⁷⁴ To achieve that goal, the number of docks capable of constructing VLCCs in China is being increased from the current nine to 30.⁷⁵ China's largest carrier of crude oil, China Shipping Development Co Ltd, ordered four VLCCs from a Dalian shippard in April 2006, and plans to increase the size of its supertanker fleet from two VLCCs to 12 by 2010.⁷⁶ Expanding the size of the country's supertanker fleet not only helps China improve its energy supply security, but is also a trade enabler: ownership of substantial tonnage is 'instrumental in the growth of national trade'.⁷⁷

CANALS AND PIPELINES

President Hu's call for the adoption of new strategies to enhance the country's energy security resulted in several proposals aimed at reducing the country's dependence on Southeast Asian chokepoints. The proposals have included China's possible participation in a multi-billion dollar project to cut a canal across the Kra Isthmus in southern Thailand, and the construction of oil pipelines across Burma and Pakistan. All of the proposals, however, are fraught with financial, technical and geo-political problems, and fall far short of offering a credible solution to the so-called 'Malacca dilemma'.

The proposal to link the Andaman Sea with the Gulf of Thailand by constructing a canal across the Kra Isthmus is neither new, nor Chinese in origin. The idea was first mooted in 1677 during the reign of King Narai, and has been revived numerous times since then. The During the 20th century successive Thai Governments revisited the project, almost always during times of economic recession. Each time, however, the project failed to get off the ground due to a combination of excessive cost, engineering difficulties, security problems associated with separatist and communist insurgencies in the south and lack of political will.

During the 1997 Asian financial crisis, the project was dusted off yet again as a means of resolving the country's economic distress. Advocates contended that the massive public works project would help eliminate high levels of unemployment, and that once completed the canal would generate significant revenue through the administration of transit fees, as well as the establishment of oil refining facilities

and manufacturing zones along the canal. Shipping companies would be eager to use 'Asia's Panama Canal' as ships would be able to shave off 3-4 days travelling time by avoiding the heavily congested and 'pirate infested' Malacca Strait. The canal's chief proponent was retired General Chavalit Yongchaiyudh, former commander-in-chief of the Royal Thai Army during the 1980s, Prime Minister in 1996-97, and Deputy Prime Minister in the first administration of Prime Minister Thaksin Shinawatra (2001-05). In 2001 a national committee headed by Chavalit proposed a two-lane canal with a major harbour at each end, an east-west highway running parallel, and oil refineries and storage tanks: construction was expected to take 10 years and cost US\$20-25 billion. According to Chavalit, who had established close links to the Chinese Government during the 1980s when the two countries had forged a de facto strategic alliance aimed at countering Vietnam's occupation of Cambodia, China, along with several other countries in East Asia, had expressed a keen interest in financing and constructing the canal.⁷⁹ In early 2003 a mysterious company based in Hong Kong, the Phuket Pass Project Co Ltd, offered US\$50 million to finance a feasibility study.80 By mid-2003, however, the project had collapsed amid allegations of corruption and financial mismanagement. The canal eventually lost its champion when Chavalit announced his retirement from national politics in 2005. In any case China seems to have lost interest in the Kra Canal during the first half of 2005, partly because it balked at the price tag, but also because in April, Russia announced that a proposed pipeline from Siberia would prioritise China over Japan.

Thaksin himself had little faith in the canal project and instead proposed an oil pipeline across southern Thailand known as the Strategic Energy Land Bridge (SELB). Under the proposal, ships would be able to off-load their cargo of crude oil at the Andaman Sea terminus: the oil would then be pumped through a 240km underground pipeline and then loaded onto tankers at the Gulf of Thailand terminus. The SELB would bypass the Malacca Strait altogether and cost a fraction of the proposed Kra Canal. According to reports in the Thai press, initially several of China's state-owned energy companies expressed interest in the project, but their enthusiasm waned due to higher than expected construction costs and estimates that it would actually be more expensive to transport oil through the SELB than through the strait.⁸¹

Thaksin's ouster by the Thai military in September 2006 finally killed the SELB project. However, in April 2007 an almost identical proposal for the northern states of Malaysia was approved in principle by Kuala Lumpur. It was reported that a consortium of Malaysian and Iranian companies had proposed the construction of two oil refineries on the country's east and west coasts, joined together by a 320-km pipeline. Like the SELB, the Malaysian project envisaged ships off-loading crude oil at one end of the pipeline for transfer through to waiting vessels at the other end. The estimated cost of the project was put at US\$14.5 billion.⁸² By mid-year, however, the Malaysian Government had seemingly turned cautious, warning that an environmental impact survey would have to be conducted before final approval

could be given.⁸³ Thus far, China has not indicated whether it will be investing in the Malaysian pipeline, should it finally be given the go ahead.

China has also examined two other major infrastructure projects as a means of reducing its strategic vulnerabilities. The first is the construction of a US\$2 billion 1,250-km pipeline from the Burmese port of Sittwe to Kunming in China's Yunnan province. The Sittwe-Kunming pipeline is appealing to China for two reasons. First, oil tankers carrying crude oil from the Middle East and Africa could sail directly to Burma, obviating the need to pass through the Malacca Strait. Second, the project is attractive because since the late 1980s the Chinese Government and the Burmese junta have forged a close political relationship.⁸⁴ Talks between the Chinese and Burmese governments on the feasibility of the project began in mid-2004, and in April 2007 it was reported that the Burmese Government had approved the pipeline and that construction would begin later that year.⁸⁵ The junta's crackdown against anti-government demonstrators in September 2007 is unlikely to affect the project.

A second proposal involves the construction of an oil pipeline from the Pakistani port of Gwadar to China's Xinjiang province. The Chinese Government has been Gwadar's largest foreign investor and Pakistani President Pervez Musharraf has pushed the idea of a China-Pakistan 'energy corridor' for several years now, on the grounds that the construction of oil refineries and oil and has trans-shipment facilities would benefit the Pakistani economy, while China would gain an alternative to the Malacca Strait. A China-Pakistan energy corridor would be an expensive proposition given the great distances involved and the rugged terrain a pipeline would have to cross. Moreover, Baluchistan Province, in which Gwadar is located, is prone to separatist violence. However, a pipeline through Pakistan would be attractive to China for two reasons. First, Gwadar's close proximity to the Arabian Gulf would mean that all chokepoints save the Strait of Hormuz would be effectively bypassed. Second, Islamabad is a close ally of China. Accordingly, Beijing seems to be taking the proposal seriously, and in February 2006 China agreed to help Pakistan develop oil refineries, natural gas terminals and oil and gas transit facilities.86 A pipeline may follow.

In addition to cost, construction and political problems associated with these various projects, they all suffer from one major flaw: they do not resolve the fundamental problem of China's inability to secure its SLOCs. Chinese vessels sailing to Burma, Pakistan, Thailand or Malaysia would be still be vulnerable to interdiction by foreign navies before they reached their destination. Few Chinese analysts have addressed this flaw, though one particularly perceptive analysis has hit the nail right on the head:

As is the case with the Kra Isthmus canal, the Sino-Burmese and Sino-Pakistani pipelines would not be able to fundamentally avoid the impact of the navies of major powers. If the fleets of such powers directly intercept our tankers in the Persian Gulf, the Arabian Sea, or the Suez Canal, the Red Sea, the Gulf of Aden, and so on, the abovementioned three schemes would all become meaningless. Thus, before

the Chinese Navy's ocean-going squadrons can achieve some kind of force parity with the navies of major powers in the Indian Ocean, the security problem of China's ocean transport routes and straits cannot be resolved.⁸⁷

Thus, the authors conclude, China can only resolve its 'Malacca dilemma' through the possession of a strong navy capable of securing distant SLOCs.

CHINA AND SAFETY AND SECURITY IN THE MALACCA STRAIT

Even if one or more of the projects outlined above comes to fruition, China's growing demand for energy resources from the Middle East and Africa means that it will continue to be a heavy user of the Malacca Strait, and perhaps the primary user if it has not already attained that position, well into the future. As a result of its growing dependency on Southeast Asian sea lanes, China over the past several years has taken an increasing interest in non-traditional security concerns in the strait as well as navigational safety issues. Indeed China has offered financial resources to address these problems. This is a new and significant development, as previously China had shown little interest in security and safety issues in the strait.

The role of external powers in the security of the Malacca Strait can be a highly sensitive issue. The United States discovered this in April 2004 when, against the backdrop of rising reports of piracy attacks in the region and fears of a major maritime terrorism incident, the Commander of the US Pacific Command, Admiral Thomas Fargo, was misquoted by the regional press suggesting that the United States was considering deploying special forces to the Malacca Strait as part of its Regional Maritime Security Initiative. The Malaysian and Indonesian governments reacted angrily to the reports, charging that a US military presence in the strait would not only infringe the littoral states' sovereignty, but also fuel Islamic radicalism in Southeast Asia. 88 Since then, Indonesia and Malaysia have consistently argued that the security of the strait is the sole responsibility of the littoral states (Singapore, which views sea lane security as a matter of national survival, has been more flexible on the issue, but has deferred to the sensitivities of its neighbours). But while Malaysia and Indonesia have rejected an overt military role for external powers such as the United States, Japan, China and India, they have welcomed offers of assistance in the form of capacity building including information/intelligence exchange, training and the provision of technology and equipment.

Safety of shipping in the straits is less sensitive but no less contentious. Article 43 of the LOSC calls on user states of international straits to cooperate with littoral states to help in the provision of navigational safety aids, and prevent, reduce and control pollution from ships - the so-called 'burden sharing clause'. 89 For many years Indonesia and Malaysia have urged the user states to discharge their obligations under Article 43 by stepping up financial and technical assistance, but only Japan has really stepped up to the plate. Over the past twenty years, Japan has played an active, but low-profile, role in assisting the littoral states, especially

Indonesia. Japan's efforts have been far from altruistic; however, and principally related to improving the country's overall energy security situation (it is estimated that approximately 90 per cent of Japan's energy imports transit through the Malacca Strait).90 Japan, through organisations such as the Nippon Foundation, has financed the installation and upkeep of navigational safety aids in the strait, as well as donated patrol boats and training vessels to Indonesia and Malaysia. The Japan Coast Guard has also conducted regular anti-piracy training exercises with regional navies. The Japanese Government was also the driving force behind the Regional Cooperation Agreement to Combat Piracy and Armed Robbery Against Ships at Sea in Asia (ReCAAP), an agreement designed to tackle the problem of maritime depredations in Asia and signed by 16 countries in 2004. 91 The United States, on the other hand, has chosen to emphasise security issues. The US Navy and US Coast Guard conduct annual training exercises with the navies of Southeast Asia, while the United States has financed the establishment of a chain of coastal radar stations in Indonesia so the authorities can gain a clearer picture of vessel movements in the Malacca Strait.92

Without fanfare, China has begun offering the strait's littoral states capacity building assistance. China signed maritime cooperation agreements with Malaysia and Indonesia in April 2005 and August 2006 respectively.93 China and Malaysia discussed maritime security cooperation during Prime Minister Wen Jiabao's visit to Kuala Lumpur in December 2005, and the two sides agreed to increase information and intelligence exchange.94 Following the agreement with Indonesia, China donated computer equipment to the country's Maritime Security Coordinating Agency (Bangkorkamla) and has reportedly offered slots to Indonesian naval personnel for training courses in China. 95 On the issue of safety in the strait, at a conference sponsored by the International Maritime Organization (IMO) in Jakarta in September 2005, the head of the Chinese delegation, Ju Chengzhi, declared that China was ready to assist the littoral states in the areas of capacity building, technical exchanges and personnel training.96 At a follow up meeting in Kuala Lumpur a year later, China offered to participate in a number of projects aimed at improving safety and security in the strait, including replacement of navigational aids damaged by the 26 December 2004 Indian Ocean tsunami. All the while, China has been careful to emphasise that its support for security and safety initiatives will not infringe on the littoral states' sovereignty.

China's involvement in efforts to improve safety and security in the strait is small scale at the moment, but is likely to expand in the near future. However, while the littoral states welcome support from China and other external powers they do not want to see the Malacca Strait become an arena for their geopolitical rivalries to be played out. At the Shangri La Dialogue meeting in June 2007, Singaporean Defence Minister Teo Chee Hean articulated these concerns when he said China and Japan's involvement in sea lane security in Southeast Asia should be 'constructive' and 'consistent with international law'.⁹⁷

Conclusion

China can no longer be considered a continental Asian power. As demonstrated in this paper, it has emerged as a global maritime power in the 21st century, home to the world's largest fleet of merchant ships, some of the world's busiest ports, and a booming and expanding shipbuilding industry that is on target to overtake its East Asian counterparts within a few short years, if it has not already done so. The transformation has been nothing short of remarkable. But while the world's seas and oceans have presented China with enormous opportunities, its growing dependence on the maritime domain for a host of economic, political and geo-strategic interests has generated some anxiety within China, anxiety that will undoubtedly increase as China powers ahead into the new millennium and the dependencies deepen. The fundamental problem China faces at present is that it is incapable of defending and protecting its maritime interests, principally access to foreign markets and overseas energy resources and other natural resources so critical for sustained economic development. Accordingly, the Chinese Government has set in motion policies to mitigate these weaknesses, including increased warship construction, improving energy security at home, and exploring the possibility of financing major landbased infrastructure projects designed to bypass strategic maritime chokepoints in Southeast Asia. All of these initiatives require considerable financial outlay and time before they will begin to pay dividends: none will actually resolve the problem of China's maritime vulnerabilities. Faced with this reality, sea lane security may well become a force for cooperation among the great powers rather than a source of geopolitical rivalry.

Japan's Contemporary Naval Power and Regional Maritime Cooperation

Alessio Patalano

With the first decade of the 21st century drawing to a close, transnational sources of insecurity and persisting politico-military tensions in East Asia are driving Japan's ongoing shift towards a more 'flexible' defensive posture. The Japan Self-Defense Force (JSDF)is adjusting its organisational structure and doctrine to address the plethora of challenges stemming from conventional military threats (missile attacks, violation of territorial air and maritime space by foreign military assets), non-state actors (terrorism, piracy), as well as humanitarian operations overseas (disaster relief, post-war reconstruction assistance).

This paper argues that the Japan Maritime Self-Defense Force (JMSDF) has, and will continue to play, a central role in this transformation, providing Japan with a comprehensive defensive shield, a valid instrument of deterrence, and an effective tool to implement the country's diplomatic action in the region and elsewhere. Domestically, Japan's dependence on the overseas supply of raw materials is emphasised by the crucial contribution of naval assets in protecting the main sea lines of communication. The core importance of the AEGIS-equipped destroyers to Japan's concern with ballistic missile defence (BMD) underscores the advantages of sea-based platforms in fulfilling the requirements of both military defence and deterrence. From the first deployment of minesweepers in the aftermath of the 1990-91 Gulf War to the 2001 commitment in the Indian Ocean during the military campaign in Afghanistan, the overseas deployments of JMSDF units have demonstrated the importance of naval power in shaping Japan's contribution to international stability.¹ Similarly, the navy's front-line commitment in promoting navy-to-navy relations and confidence-building measures, including visit/exchanges, joint exercises and maritime cooperation, such as the Proliferation Security Initiative (PSI), with other regional actors empowered the Japanese Government with an important means for cooperative diplomacy.

This paper is divided into two main sections: the first focusing on the nature of Japan's contemporary naval power, and the second examining from an historical perspective its relationship with bilateral and multilateral forms of maritime cooperation. Because of Japan's specific geography and enduring sea-based economic interests, the inherent flexibility of naval power constitutes a key feature of Japan's post-Cold War national defence and regional security. In this respect, the paper contends that Japan's recent naval development represents an articulated response that strikes a balance between the core requirements of defence against regional naval competitors and international duties. Against such a demanding undertaking, until recently Japan largely favoured strong bilateral ties as an effective

way to complement their limited naval power. Today, with the JMSDF achieving full professional maturity with a more balanced fleet, multilateral cooperation with key regional actors to address issues affecting East Asian security and maritime trade are regarded in Japan as important. For all these reasons, the JMSDF possesses the credentials to be recognised by regional partners as having a central role in enhancing Asian maritime security.

Recent Japanese Naval Policy

When the Soviet Union imploded in 1991, the JMSDF was well on the way to reaching the force level set in the second half of the 1970s by the National Defence Programme Outline (NDPO), or Taiko,² officially adopted by the Japanese Government in October 1976. By 1995, the JMSDF fielded a modern fleet of 62 main surface combatants, 16 modern and stealthy submarines, approximately 220 aircraft, including 100 P-3C Orion maritime patrol aircraft, and some 30 mine warfare ships; the fleet's main tasks included the defence of Japan's territorial waters, three main straits (Soya, Tsugaru, Tsushima), and sea lanes up to 1000 nautical miles from Soviet raiders.³ By performing these missions the JMSDF assumed an enduring central role in the post-1976 Cold War national strategy. It patrolled the vital trade arteries transporting the lifeblood of the Japanese economy whilst contributing to the US-Japan security partnership favouring 'the safe movements of the US 7th Fleet in East Asian waters'. As one authoritative study noted in the early 1990s, Japan's naval power was an effective and capable force, tailored for anti-submarine warfare (ASW), localised sea control in the Sea of Japan and East China Sea, and was wellintegrated with US naval forces in the region.5

The sudden end of the bi-polar confrontation left Japanese political and defence circles - as much as those in other nations of the Western bloc - rather disoriented on the courses of action necessary to guarantee security. In particular, the failure to provide some form of military support during the 1990-91 Gulf War prompted many to question the merits of Japan's passive, deterrence-oriented defence policy.⁷ Tokyo, they argued, had to address some of its constitutional constraints to be able to participate militarily in operations under international mandate, and thus 'normalise' its behaviour as a state actor.⁸ In February 1994, Prime Minister Hosokawa Morihiro (1993-94) took the initiative and commissioned a study (the socalled Higuchi report), that eventually constituted the basis for the drafting of the new NDPO,9 adopted in November 1995.10 Both documents stressed that cooperative patterns of security represented the likely leitmotifs of future international relations and suggested a defence agenda aiming at engaging in a more 'active and constructive security policy'. 11 Attention to international stability was certainly the main intellectual novelty of the document, but it was not the only priority Japanese strategic planners sought to address. In Northeast Asia, the power vacuum created by the disappearance of one of the superpowers had made the strategic situation more volatile, with continuing tensions in the Korean peninsula and across the Taiwan Strait. Equally testing for regional stability were the actions of China, which seemingly profited from the post-Cold War transition to achieve greater influence, through comprehensive economic and military modernisation.¹²

Thus, the NDPO constituted a first attempt to integrate the requirements for a higher international military profile with those necessary to deal with closer regional tensions. ¹³ The JSDF had to become 'streamlined, effective and flexible'. ¹⁴ For the JMSDF, the new posture demanded the enhancement of its ability to offer agile and accurate responses for new expeditionary missions without undermining the Fleet's capability to maintain sea control in Northeast Asian waters. ¹⁵ This was because the basic requirements of the national naval strategy remained substantially unaltered since 'the defence of adjacent seas and the securing the safety of maritime traffic are essential in order to secure the foundations of national survival', and constituted a 'matter of life or death' whether in peacetime or in cases of emergency. ¹⁶

The inherent flexibility of naval platforms in pursuing the international and national objectives of the transformation strategy reconfirmed the central role of the JMSDF in national defence, though it did not prevent a downsizing of the Fleet's inventory. In the Pacific, the Soviet Navy started depleting rapidly and China's expanding 'scope of activities in the high seas' was observed with a keen eye, as its force modernisation was 'expected to gradually proceed at a moderate rate'. ¹⁷ Such considerations were coupled with other more crucial domestic factors, notably a severe economic recession that affected the country since the beginning of the 1990s. Compared to the force level established by the 1976 NDPO, the new document called for a reduction of approximately 16 per cent of the surface fleet (from approximately 60 to 50 major vessels) and of almost 23 per cent of the air component (from approximately 220 to 170 aircraft). ¹⁸

In the second half of the 1980s, a study was undertaken into acquiring a large amphibious ship to redeploy ground forces from western to northern Japan in case of invasion. In 1993, following the first overseas deployments to UN-led peace support operations, the JMSDF used this study to design and procure its first landing ship JDS *Osumi*.¹⁹ With its 8900 ton standard displacement (14,000-ton full displacement), flat top upper deck (the front deck is used as vehicle loading space, the rear deck for helicopter landing), internal landing platform dock equipped with air cushion landing craft, the *Osumi* soon became an iconic symbol of the JMSDF's quick and professional response to Japan's revitalised international profile.²⁰ In 1998 and 1999, funds were secured for another two units; and together with three 8100-ton fleet replenishment vessels of the *Towada* class commissioned between 1989-90, they provide Japan's naval power with an expeditionary dimension that, in an era of 'financial austerity', nicely matched the new trends of national policy.

In 2004, whilst the structural changes initiated in the 1990s were being implemented, strategic planners at the Japan Defence Agency (JDA)²¹ decided to embark in a revision of the NDPO to account for the systemic transformations brought about by the 11 September 2001 terrorist attacks on the United States; North Korea's political brinkmanship, missile tests and nuclear program; and China's double-digit investment in military modernisation. The new document, which was

approved in December 2004 as the *National Defence Programme Guideline* (NDPG), partly reviewed the previous emphasis on multilateral cooperation, though it sought to maintain an overall balanced approach; with the JSDF to retain state-of-the-art defensive capabilities and an expeditionary-oriented, versatile posture, completing its transition towards a 'multi-functional flexible defence force'.²² The JSDF was to continue recalibrating its internal organisation and procurement policies to ensure the prevention or the emergence of threats to the nation and, in case of emergencies, to determine 'where and how' to employ the country's military 'to maximum effect'.²³

One crucial step taken to further the JSDF 'response capability-oriented' posture was the March 2006 upgrading of the Joint Staff Office (JSO). Taking credit of the lessons learned on the need for greater inter-Service coordination from the February 2004 deployment in Iraq and the December 2004 - March 2005 relief operations during Indonesia's tsunami crisis, Japanese defence strategists opted for a system in which the JSO was responsible, by means of *ad hoc* task forces, for plans and operations in areas requiring substantial 'joint-ness' such as ballistic missile defence, off-shore islands defence, or participation in international missions. In turn, the single Services retained primary responsibility for equipment, training, and doctrine to preserve their ability to operate in their distinctive environments.²⁴

For the JMSDF, the new national doctrine rewarded the transformation from a Cold War 'sea denial' force to one engaged in defence against maritime power projection through exploiting sea control (to defend Japan's maritime space within its exclusive economic zone), expeditionary missions (to contribute to international security) and 'good order at sea' (to contribute to the safety of maritime activities).²⁵ In his official instructions, the Chief of (Maritime) Staff (CMS), JMSDF, Admiral Furusho Koichi (2003-05) introduced the concept of 'flexibility' as one of the core tenets of naval doctrine. Each task could no longer be carried out along preestablished, rigid plans as was the case during the Cold War; rather, from the commanders deployed at sea to the strategic planners in Tokyo, all Service members had to learn to be ready to diversify their responses to deal with 'the unexpected'. 26 To that end, the Fleet was reorganised, with the basic tactical formation shifting from the Cold War-style ASW flotilla of 7 DDs and a DDH to the more versatile escort division of 3 DDs and a DDH/DDG. Compared to the 1995 NDPO, the relative slowdown of the force restructuring in the NDPG, equalled about 9 per cent of its surface fleet (from approximately 50 to 47 units) and a little less than 12 per cent of its air arm (from approximately 170 to 150 aircraft).²⁷

The NDPG's partial review of multilateral cooperation stemmed from concerns within defence circles on the wider impact on Japanese security of Chinese military modernisation.²⁸ In naval terms, unlike the Soviet naval challenge, the People's Liberation Army Navy (PLAN) was not designed for strategic deterrence or to temporarily contest western sea power by harassing Japanese trade routes. The PLAN represented a more sophisticated competitor, one whose steady rise was entwined with China's increasing economic interests at sea.²⁹ As an authoritative

Chinese assessment put it, the PLAN not only aimed to build-up a powerful fleet for sea denial, but to possess 'enough might to effectively control when necessary the key sea lanes from Chinese sea-space to the high seas (including) the Korea (Tsushima) Strait and all straits or channels in the Ryukyu Islands'.³⁰ Japanese data collected since the end of the 1990s on Chinese naval activities supported these impressions.³¹ Thus, the ability to protect Northeast Asian sea lanes made naval power vital to Japan's survival. In 2001, CMS Admiral Ishikawa Toru (2001-03) had pointed out that 'for the JMSDF, the dawn of the 21st century paved the way to an 'era of [hard] work'. In one step, learning the lessons of the 77-year history of the Imperial Japanese Navy (IJN), the JMSDF passed from a period of 'infancy' to one of 'maturity'.³²

Four years after the adoption of the NDPG, the path it set of greater attention on the defence capabilities of regional navies, remains the main operational priority of the JMSDF and includes a focus on responses against: ballistic missile threats, infiltration by guerrillas and Special Forces, and incursions on peripheral islands and of air/maritime space.³³ The recent launching of Japan's first flat-top helicopter-carrying destroyer JDS *Hyuga* and the first air independent propulsion submarine JDS *Soryu*: both featuring improved command, control, communications, computers and intelligence (C4I), cutting edge combat systems³⁴ and extended operational endurance allows the JMSDF to perform its given tasks.³⁵ These new platforms enable the JMSDF to address the security challenges facing Japan in the 21st century security, where naval power can offer a three-dimensional shield in the maritime space from the East China Sea to the Sea of Japan, both protecting the main sea lanes and providing an amphibious capability to meet international interests.

Japan's Maritime Cooperation: Balancing Bilateralism with *Ad Hoc* Multilateralism

Japan has a long history of bilateral naval alliances, and these were its predominant interaction in the international arena. Prior to the Pacific War, the Anglo-Japanese Alliance (1902-23) represented a cornerstone of Japanese international relations, resting on the crucial contribution of naval power to maintain Japan's leading role in the East Asia.³⁶ Equally, the alliance proved, through the participation of the IJN in naval operations in the Pacific and Indian oceans and in the Mediterranean during World War I, Tokyo's qualities as a valid maritime partner.³⁷ For Japan, avoiding international isolation and above all, substantial security concerns informed the decision to maintain the strategic partnership for two decades.³⁸ The alliance strengthened Japan's international prestige and status; in turn, the political support of a powerful global maritime empire enabled Japan to use its naval power to pursue the key security objective of creating a defensive perimeter against the menace of Russian expansionism in Asia until 1907, and then against the US Navy.³⁹ Japan's pre-war beneficial bilateral naval experience stands in stark contrast with the more controversial multilateral commitments in the Washington Naval Treaty 1922 and the London Naval Treaty 1930.40 Even the 1940 attempt to create the first Asian 'regional

organisation' with the establishment of a 'Greater East Asian Co-Prosperity Sphere', fulfilling the IJN's long-term support for an expansion of Japanese influence towards the South China Sea, had more to do with Japan's defence requirements and the lack of crucial primary resources like oil, timber and rubber (instrumental to operate the navy's vast fleet), than maritime cooperation.⁴¹

In the Cold War, Japan's alignment with the Western bloc was demonstrated through a number of bilateral security treaties with the United States, specifically the *US and Japan Mutual Defense Assistance Agreement 1954* and the *Treaty of Mutual Cooperation and Security between the United States and Japan 1960*. The culmination of these treaties reflected the political realism of Japanese policymakers in the late 1940s and early 1950s, headed by Prime Minister Yoshida Shigeru (1946-47, 1948-54). The war catastrophe had left the nation psychologically exhausted and with a shattered economy; Yoshida, and the leaders who followed him, subsequently decided to focus on economic recovery to rehabilitate Japan's lost status, prestige and power, in what became known as the 'Yoshida Doctrine'. This approach, coupled by severe constitutional restrictions that only legitimised the use of military power for self-defence, as well as banning entry to any collective security organisations, meant Japan had to rely on the global reach of the US Navy to supplement the limited capabilities of the JSDF.

Though for different reasons from the pre-war era, bilateralism again came to represent Japan's primary form of military cooperation. In the 1970s, as Japan's economy flourished, the naval dimension of the partnership assumed a greater significance, as it was in the *Anglo-Japanese Alliance*. The defence of vital national interests at sea, based on Japan's export-oriented economy and consequent heavy reliance on maritime trade, laid the foundation for Japan's greater commitment to naval power and its contribution to the strategic partnership.⁴⁴ Thus, the 1978 Guidelines for Defence Cooperation established a new framework for more effective role sharing, where the JMSDF assumed specific 'roles and missions', namely to establish sea control in Japan's main straits and in the Northwest Pacific (south of Japan), east of the Philippines and west of Guam; and to reinforce its air defence capabilities over the Sea of Japan.⁴⁵ As Admiral Ishikawa put it, the result was 'a perfect deterrent' mechanism that served both United States and Japanese regional interests, with the JMSDF as the 'shield' and the US Navy as the 'spear', guarding the Pacific.⁴⁶

For the subsequent thirty years, the US-Japan naval ties has been regarded by senior JMSDF officers as the bedrock of Japan's naval strategy, enabling a joint approach to security issues in adjacent areas, such as like the Taiwan Strait.⁴⁷ Indeed, a solution to issues concerning Taiwan figured among the 'common strategic objectives' in the 19 February 2005 joint statement of the US-Japan Security Committee. Similar to the early alliance with the Royal Navy, bilateralism was instrumental in Japan's pursuit of national defence. In January 2007, former CMS Admiral Eiji Yoshikawa (2006-08) openly remarked that 'Japan views its strategic

alliance with the United States as the cornerstone of peace and stability in all East Asia'.48

A close bilateral connection with the United States played a significant three-fold role in strengthening the capabilities of Japan's post-war naval power. First, training and exercises with the US Navy, especially after Japan joined the Rim of the Pacific Exercises in 1980, allowed the JMSDF to enhance its professional standards, and test capabilities in conditions as close as possible to real combat. Second, close ties with the US Navy regularly exposed the JMSDF to technological innovation in tactics and operations. Third, the implementation in the 1980s and early 1990s of improved coordination and interoperability with the US Navy as a key aspect of JMSDF doctrine (the concept of 'renkei'), the JMSDF improved its ability to operate internationally. In recent years, JMSDF involvement in BMD, with the first successful missile test at sea completed in December 2007, and participation in joint operations such as those conducted in the Indian Ocean since 2001, demonstrate how bilateral maritime cooperation has maximised the impact of Japanese naval power, improving its effectiveness, while serving key national interests and testing its potential as contributor to multinational coalitions.

As the new millennium dawned, JMSDF capabilities and its ability to contribute to maritime cooperation entered a new stage. The 1990s diversification of security threats in both their sources: failed states, rogue states and non-state actors; and their nature: high-intensity warfare scenarios, as well as a variety of military operations other than war, demanded a broader approach.⁵¹ Developments in international maritime law, particularly the coming into effect of the *United Nations Convention on the Law of the Sea 1982* (LOSC), created additional tension in North Asia, as new boundaries for exclusive economic zones and continental shelfs saw Japan involved in disputes with China, South Korea and Russia.⁵² Against this background, both the NDPO and the NDPG came to consider multilateral forms of cooperation, especially on international security issues, as an important factor.⁵³ The main difference between the two documents lay in the approach, with the NDPG emphasising Japan's support to international peace cooperation 'activities' over 'multilateral organisations'.⁵⁴

Maritime cooperation provides a good example of such shifting emphasis. After Japan's involvement with the ASEAN Regional Forum (ARF) in 1994, the JMSDF developed new options for the expansion of the navy's constabulary activities, with a framework in place by 1997. The proposal, named Ocean Peace Keeping (OPK) was timely, with the entry into force of the LOSC in 1994, and its focus on issues connected to the management of the marine environment in Asia and their impact on regional maritime state actors. Hence, the OPK proposed the coordinated deployment of naval and air assets from regional navies or/and coast guards to highly vulnerable points of transit in Southeast Asian waters, to conduct routinely joint missions ranging from surveillance and patrolling, to military deployments to defuse escalating problems. The OPK identified promising areas for cooperation at sea, highlighting the use of maritime forces for policing actions to combat piracy,

maritime terrorism and illegal trafficking. It circulated within civilian defence circles and was put forward as a potential model for future regional initiatives by JDA General Director Ishiba Shigeru at the 2003 and 2004 meetings of the IISS-sponsored Asia Security Conference.⁵⁸ As he put it, OPK was a clear demonstration of Japan's willingness 'to bear appropriate responsibility in the world as well as in the region', and 'to actively speak out and take action'.⁵⁹

The OPK received only limited support from senior JMSDF officers, for it implied that joint operations could already take place. Given its limited legal status and awareness of the anxiety that warships flying Japan's colours might generate in Southeast Asia, the JMSDF preferred coalitions of an *ad hoc*, task-oriented character. The US-sponsored Proliferation Security Initiative (PSI), which addressed multilaterally a core Japanese security concern, namely the proliferation of weapons of mass destruction (WMD), offered a framework for coalition operations. From its creation in May 2003, the PSI was well received within Japanese naval circles, ⁶⁰ as it represented an invaluable opportunity to build a consensus on the beneficial value of Japan's naval power to regional stability, and to enhance its operational capability and legal authority to conduct interdiction, interception and on-the-spot inspection on the high seas. ⁶¹ Concurrently, it promoted greater integration with the Japan Coast Guard. ⁶²

From 2003 to 2005, Japan dispatched observers to all except two PSI exercises, and participated in 2 of them, the second of which was hosted off the coast of Sagami Bay in October 2004.63 In Exercise TEAM SAMURAI 04, the JMSDF role was limited to surveillance, a choice likely caused by Chinese and South Korean lack of support for Japan's greater involvement in regional military affairs. In turn, this led some experts to doubt Japan's real capacity to assume more than just a low-key profile in international military activities.⁶⁴ Yet in 2005, Japan dispatched a contingent of 340 men, one destroyer and two P3-C maritime patrol aircraft to participate in their first overseas PSI exercise, significantly taking place in the South China Sea. 65 In 2007, Japan took another decisive step when hosting the second PSI Exercise PACIFIC SHIELD 07, in which the JMSDF conducted search/detection/tracking actions as well as boarding inspections. ⁶⁶ The effectiveness of this selective form of cooperation became apparent in October 2006, when in the aftermath of the UN Resolution No 1718 calling for inspection of cargoes to and from North Korea to prevent the smuggling of WMD-related materiel, joint-maritime interdiction operations became a realistic option.67

As Japan's recent PSI experience testifies, multilateral cooperation is gaining a greater role as a force multiplier on Japan's naval power. At the operational level, multinational exercises aiming to develop common practices to tackle specific issues affecting East Asian region have been an important experience, testing JMSDF capabilities and professionalism. They suggested improvements to the complex legislative system regulating JMSDF operations on the high seas; and contributed to increased trust among participating countries with the JMSDF and its overseas deployment. However, trust and JMSDF overseas deployments remain a sensitive

matter, where it lags behind the Japan Coast Guard. In peacetime, the Japan Coast Guard has an exclusive responsibility for the safety of commercial vessels and this has enabled its deployment on joint anti-piracy missions with Southeast Asian counterparts in the Philippines, Indonesia, Malaysia and Singapore. Some argue that whereas 'other Asian countries may resist the idea of Japanese military power'; they 'have little resistance to the idea of Japanese police power'. In all, since Japan's interests in maritime trade are unlikely to diminish in the future, its commitment to mission-oriented multilateral coalitions at sea is likely to grow.

Conclusions

Japan entered the 21st century fielding one of the finest and best equipped naval forces in the world. The foundations of its naval power were laid during the Cold War, and evolved over the past two decades into a well-balanced fleet representing the country's first line of defence in Northeast Asia, and a primary means for coalition operations on the high seas. An insular geography and heavy reliance on maritime trade made a degree of naval power not a matter of choice, nor the expression of aggressive military ambitions, but a matter of survival for Japan. Current Japanese concerns over China's maritime ambitions in the East and South China seas are not just as a question of regional leadership, or of historical and political antagonism. The security and free access to maritime trade routes in the Taiwan or Malacca straits are matters of paramount importance for Japan's national security. Naval power, both in its deterrent and diplomatic capacities, represents a vital element to safeguard them.⁷⁰

Within this framework, historical bilateral alliances, first with Britain and, after WWII, with the United States, represented a particularly valid option to cope with inherent economic, legal, social and operational limitations affecting the various phases of development of Japan's naval power. Bilateralism represented a way to enhance the role of naval forces on Japanese security through the presence of a powerful naval ally in the region; in turn, these close ties represented a valuable source to strengthen the capabilities of the JMSDF.

Today, as Japan fields a mature and professional naval force that is less reliant on a single dominant partner to fulfil its tasks, other bilateral ties with countries having shared maritime interests, such as India and Australia are favoured. In the case of India, closer cooperation on matters of maritime security (including terrorism, piracy and counter-proliferation) in the Indian Ocean have been at the centre of recent developments, most notably the organisation of multilateral joint exercises off Japan in April 2007 and Exercise MALABAR off India in September 2007. A similar attitude underlined the signing of the *Declaration on Security Cooperation between Japan and Australia* in March 2007. Analysts have perceived the expanding horizon of Japanese 'bilateral' initiatives as intimately connected to the Japan's willingness to contain China.⁷² Yet, such analysis of the rationale underpinning Japan's bilateral actions cannot underestimate the subordination of specific threat perceptions to Japan's broader maritime interests.

Indeed, it is for this reason that Japan's latest efforts in multilateral maritime cooperation focused on 'activities' rather than on the creation of rigid multilateral frameworks.73 They focused on specific coalition-based initiatives (like the PSI) to address transnational issues with potentially disastrous consequences for regional security and maritime economic activities. Japanese awareness of the need for a concerted approach to tackle the diversified threats endangering maritime activities defines Japan's commitment to regional maritime cooperation. Domestic controversies surrounding Japan's legal ability to join organisations for collective self-defence is another factor that informs this approach. Yet, what matters is that the tools of Japan's naval power, the JMSDF and the Japan Coast Guard are willingly committed to operate in coalitions to find solutions to regional problems. As Admiral Yoshikawa stated, 'the greatest challenge we'll have to face in the years ahead will be to cope with those missions that are based on international cooperation. But I am convinced that we will achieve our stated goals'.74 This determination and the reasons for it ensure that Asian partners will find Japan a reliable partner in the effort to enhance through naval power regional security.

The Future of Maritime Security and Regional Cooperation in East Asia: ReCAAP, PSI, and the Tokyo MOU

Eric J Lobsinger

It is taken as a given that nation states ultimately pursue their narrow national interests in matters of foreign policy, particularly when national security is at stake. National interests may not necessarily coincide with regional, much less global, interests. Nonetheless, when a series of events occur that reverberate throughout many parts of the globe, congruency amongst different states is more likely to occur. To some extent, this is what happened in the field of counter-terrorism, especially in the form of maritime security. After the United States suffered terrorist attacks on 11 September 2001, followed by gruesome terrorist bombings in Bali on 12 October 2002, Madrid on 11 March 2004, and London on 7 July 2005, as well as far too many other attacks, the world's attention turned to the dangers of terrorism.

The issues of maritime security, thus, received a boost in terms of priority and emphasis. This has had the effect of bringing together otherwise disparate interests for the common objective of securing the seas. In East Asia – a significant maritime region – the spirit of multilateral cooperation in security has taken the forms of new initiatives that explicitly address terrorism and pre-existing agreements that ostensibly do not mention counter-terrorism objectives but can no longer be reassessed seriously without possible counter-terrorism implications. In this respect, it may be of legal and policy significance to study what, if any, actual counter-terrorism commonalities the major maritime security measures in East Asia share with one another. Such an analysis will not only reveal what level of integration exists amongst Asian states, but also point out what may be possible for other regions facing similar circumstances.

The Global Significance of Maritime Interests in East Asia

Since the end of World War II, and particularly over the past two decades, Asia has experienced rapid economic development and trade growth. Within emerging Asia, the share of world trade increased from 21 per cent in 1990 to 34 per cent in 2006, which accounted for approximately 40 per cent of the total increase in world trade over this period.¹ Fuelled by the economic prowess of Japan, China, Korea, as well as the recent rise of other lesser-developed nations in the region, East Asia has become the world's leader in trade, boasting the highest share of trade to gross domestic product (GDP) in the world.² Indeed, exports in East Asia now exceed US\$2 trillion as more nations in the region liberalise trade and join the World Trade Organization (WTO).³

The growth in trade has propelled the status and importance of maritime ports in Asia. The top six busiest ports in the world in terms of traffic in twenty-foot equivalent unit containers (TEU) are all in Asia, with the ports in Singapore and Hong Kong far outpacing the rest of the world in volume.⁴ Developing countries in Asia account for slightly over half of all container throughput globally.⁵ The importance of Asian ports in world trade and the global supply chain is reflected in the Liner Shipping Connectivity Index (LSCI) – a composite score based on a nation's commercial fleet assignment, liner services, and vessel and fleet sizes.⁶ From 2004 to 2006, China and Hong Kong have consistently ranked number one and two in the world, respectively, out of 162 countries, and Singapore surpassed the United States in 2006 to have the third highest score on the LSCI.⁷ Indeed, Hong Kong and Singapore can boast that their exports-to-GDP ratios are 109 to 184 per cent, respectively.⁸ In 2007, Singapore handled 27.9 million containers, an increase of 13 per cent from the previous year, reasserting Singapore's status as the busiest port in the world.⁹

It is only natural that the region that possesses the largest and busiest seaports would also have one of the most heavily trafficked sea lanes in the world. The Malacca Strait and the Singapore Strait which link the Indian Ocean, the South China Sea, and the Pacific Ocean to each other, serve as the main artery for commercial ships that sail between the Indian Ocean and East Asia. Combined, the two straits total approximately 700 miles, with the narrowest point of the Malacca Strait being 8 miles and the Singapore Strait narrowing to 3 miles apart. It is through these narrow straits that vessels sail under dense traffic conditions. Whereas 94,000 ships sailed through the straits in 2004, this number is expected to rise to 141,000 ships by 2020. In 2004, 11.7 million barrels of oil were transported through the Malacca Strait daily. To place this in perspective, 90 per cent of China's 117 million tons of oil imports was shipped by oil tankers that sailed through Southeast Asia, largely via the Malacca and Singapore straits. Northeast Asia overall relies on the straits for 80 per cent of its imported oil.

Relevance of Law and Policy Analysis for East Asia

As Asia has been become a region of critical significance in the global economy, the integrity of maritime trade in Asia has attracted much attention from policy makers and scholars. The global confluence of recent counter-terrorism efforts, concerns over piracy, and the gradual synchronisation of normative values over matters such as pollution and labour rights have directly impacted the manner in which maritime trade is perceived and practiced in Asia. These issues have transformed maritime matters beyond just the realm of commercial efficiency but have made regional maritime agreements an incremental part of international law, especially in the way regional maritime agreements in Asia have the potential to influence the development of international maritime law elsewhere. Asia's leading role as a commercial maritime hub means that the policies adopted in the region to improve maritime traffic have the potential to significantly influence the rest of the maritime

world. Thus, successes in maritime law and policy in Asia can very well lead to successes in maritime practice elsewhere.

For this reason, it is critical that the major multilateral maritime agreements adopted by Asian states are examined from a perspective that not only assesses their immediate efficacy in achieving certain policy objectives, but also are examined for their legal soundness. For even if separate regional maritime agreements sufficiently meet their particular policy objectives in the short-term, without adequate legal compatibility with external sources of law, the long-term sustainability of such agreements may fall under scepticism and ultimately undermine the international legitimacy of such policies. In this respect, international law serves as a reflection of universal normative values: a yardstick to normatively measure policies and actions taken up by states. International policy making, however, also forms international law, in which law is used to achieve particular policy objectives. Thus, disagreements about law often translate into disagreements about policy, and vice versa. The heated controversies between states on the differing interpretations of various provisions in the United Nations Convention on the Law of the Sea 1982 (LOSC)¹⁶ illustrate the inseparable relationship between law and policy and the possible danger of conflict when law and policy do not adequately support one another.¹⁷

As a general matter, law and policy should be examined vis-à-vis one another, which is the methodology used in this paper. After all, a strictly legal analysis of multinational maritime agreements may seem much too theoretical and arid to credibly discuss how decisions are actually made by maritime and naval officials in the field and the fleet. Likewise, an analysis that only takes into account policy ends at the exclusion of legal considerations is equally undesirable, since it is unrealistic and naïve to view policy in a vacuum apart from the systematic rules of international law. One only needs to take a cursory look at the recent scholarly discussions over the balance between the protection of civil liberties and the demands of 'ticking time-bomb' terrorism scenarios to realise that leaving out either the legal or policy perspective in pressing issues produces, at best, incomplete assessments and conclusions.18

Three Instruments of Multilateral Maritime Cooperation in East Asia

Three maritime initiatives in Asia that are of particular note for law and policy analysis are the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP), the Proliferation Security Initiative (PSI) and the Memorandum of Understanding on Port State control in the Asia-Pacific Region (Tokyo MOU). Each of these agreements is intended to address different issues, all of which are pressing in other parts of the world as well as Asia. ReCAAP addresses piracy and armed robbery, the PSI supplements counter-terrorism efforts, and the Tokyo MOU facilitates port State control for ship compliance with maritime conventions. Although different, these three instruments are inextricably intertwined and future study of one of the agreements will increasingly call for a comparative legal and policy analysis with the others.

For example, it is not entirely clear if the mandate for ReCAAP is exclusively for piracy cases or if it might find relevance with the PSI; the distinction between maritime piracy and terrorism, after all, not being entirely clear. The port state control provided by the Tokyo MOU also potentially runs into the field of counterterrorism, particularly if port states enforce the *International Ship and Port Facility Security* (ISPS) *Code*. Although originating from different sources of authority with a plurality of policy objectives from diverse states, the instruments of maritime cooperation in the Asia-Pacific region may ultimately relate with one another. Adding to the complexity, these instruments exist in the context of Asia possessing one of the highest compliance rates in the world for the ISPS Code, but also one of the most pirated waterways in the world, the Malacca Strait, and real proliferation concerns, especially in terms of North Korea. Undoubtedly, the way in which Asia navigates regional schemes of cooperation for maritime safety and security will have an impact not only on the immense trade and commerce that flows through Asia but also on maritime policies in other regions of the globe as well.

ReCAAP

ReCAAP was adopted on 11 November 2004 and came into force on 4 September 2006. Fourteen countries are members: Bangladesh, Brunei, Cambodia, China, India, Indonesia, Japan, South Korea, Laos, Malaysia, Myanmar, the Philippines, Singapore, Sri Lanka, Thailand, and Vietnam, importantly Malaysia and Indonesia have not signed the agreement. ReCAAP is 'the first government-to-government agreement that addresses the incidence of piracy and armed robbery in Asia.'21

The agreement is designed to expedite the flow of piracy-related information between the member states, accomplished by creating a centralised clearinghouse where piracy and armed robbery reports are sent and then disseminated to the member states.²² The Information Sharing Centre (ISC), located in Singapore, serves as the centralised point for ReCAAP information. It collects reports based on the definition of 'piracy' and 'armed robbery against ships' stated in the ReCAAP Agreement.²³ 'Piracy' in the ReCAAP Agreement is identical to the definition spelled out in Article 101 of LOSC:

- (a) any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:
 - (i) on the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft;
 - (ii) against a ship, aircraft, persons or property in a place outside the jurisdiction of any State;
- (b) any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft;
- (c) any act of inciting or of intentionally facilitating an act described in subparagraph (a) or (b).²⁴

The definition offered by ReCAAP for 'armed robbery against ships' shares similar elements with 'piracy':

any illegal act of violence or detention, or any act of depredation, committed for private ends and directed against a ship, or against persons or property on board such ship, in a place within a Contracting Party's jurisdiction over such offenses;

any act of voluntary participation in the operation of a ship with knowledge of facts making it a ship for armed robbery against ships: any act of inciting or of intentionally facilitating an act described in subparagraph (a) or (b).25

Although a focus on definitions may on the surface appear overly technical for a policy assessment on the efficacy of ReCAAP, the fact that ReCAAP limits itself to piracy and armed robbery against ships - with no mention of maritime terrorism - reflects significant policy oriented realities within Asia. To be sure, piracy and armed robbery against ships are serious concerns in the region, particularly in the Malacca Strait.²⁶ Although the numbers of actual and attempted attacks in the strait have dropped precipitously over the last three years, piracy and armed robbery occurred at relatively high rates earlier in the decade.²⁷ In fact, by one calculation, 42 per cent of all pirate attacks in the world in 2003 occurred in the Malacca Strait and nearby waters.²⁸ Of the estimated 10 to 30 per cent of all pirate attacks reported from 2000 to 2005, 195 attacks were logged in and near the Malacca Strait, including 49 kidnappings, 7 deaths, and US\$1 million paid in ransom.²⁹ Against this backdrop of rampant piracy, it may be of little surprise that states in the region, especially those that rely on the Malacca Strait as a commercial artery, were motivated to craft a cooperative arrangement like ReCAAP in response to the problem.

More notably, though, is the fact that maritime terrorism is absent in the provisions and agreement for ReCAAP. The lack of a counter-terrorism component in ReCAAP is particularly conspicuous in light of the shock that hit the region when in 2005 the London insurance market classified the Malacca Strait as a 'war-risk' zone, adding the strait to twenty other areas, including Iraq, that are considered high-risk and vulnerable to terrorism.³⁰ After considerable protests from the littoral states and commercial interests, finally in 2006 the 'war-risk' classification was removed.31 Although the 'war-risk' classification was short-lived, it revealed the vulnerability of the strait to the mere perception of instability.

The threat from piracy and armed robbery is well documented through reported incidents. What may be less understood, however, is the extent that there exists the danger of terrorism. This is in part due to the hazy distinction between acts of terrorism and acts that have a piratical flavour. In and around the Malacca Strait especially, terrorist organisations like the Abu Sayyaf Group (ASG) and the Free Aceh Movement (GAM) are known to fund their activities through piracy.³² It is not entirely clear at what point actions by known terrorist organisations become acts of terrorism rather than conventional criminal acts that happen to be committed

by known terrorists. Attempts to resolve this murkiness is not helped by the fact that there is no internationally agreed upon definition of terrorism³³ and there is no consensus on whether piracy and maritime terrorism ought to be conceptualised within the same category.³⁴

In spite of the definitional limitations and challenges of ReCAAP that ostensibly appear to restrict its cooperative efforts to armed robbery and piracy - and even then only a rather narrow definition of piracy that precludes much of the Malacca Strait - the political and practical circumstances surrounding the formation of ReCAAP suggest that perhaps the regional agreement is in actuality broader in its application. Apart from legal debates on how to define piracy as distinct from maritime terrorism, the fact of the matter is that both forms of violence in the Malacca Strait are adverse to the commercial interests of the regional states. Singapore and Japan, two nations that absolutely rely on the safe and healthy flow of traffic through the strait, were among the first states to formally adhere to ReCAAP, indicating that safety of the Malacca Strait is the ultimate objective for at least some participants of the agreement, regardless of whether threats are in the form of pirates or terrorists.³⁵ Indeed, Japan's consistent advocacy of stronger maritime security measures against terrorist threats in the region, such as Japan's proposal for the Asian Maritime Security Initiative in 2004, support for the US Navy proposed Regional Maritime Security Initiative, and domestic legal amendments to permit 'peace building' efforts in Southeast Asian countries, 36 all reinforce the reasonable assumption that Japan is more interested in securing the Malacca Strait from all threats than in limiting ReCAAP to piracy and armed robbery. If this is true for at least some other contracting parties as well, ReCAAP may be seen by certain members as a vehicle to supplement other multilateral initiatives that have more explicit counter-terrorism designs, in spite of the strictly legal and plain reading of the agreement.

The Proliferation Security Initiative

Unlike ReCAAP, the PSI has clearly stated counter-terrorism objectives. US President George W Bush publicly revealed the formation of the PSI in Krakow, Poland on 31 May 2003.³⁷ The PSI is the practical policy manifestation of the *National Strategy to Combat Weapons of Mass Destruction* issued in December 2002.³⁸ In September 2003, details of the PSI were announced in Paris as the Statement of Interdiction Principles.³⁹ Ten other countries joined the United States as signatory 'core members' of the PSI at the adoption of the Statement of Interdiction Principles, Australia and Japan being the two nations from Asia.⁴⁰ Since then, several other nations have publicly joined PSI – Canada, Denmark, Norway, and Singapore in December 2003; the Czech Republic in April 2004; and Russia in May 2004.⁴¹ Overall, over seventy countries, representing the majority of the world's maritime fleet, have committed to PSI with varying degrees of support.⁴²

It is worth noting, however, that for the approximately sixty or seventy noncore nations that have expressed support for PSI, it is unclear as to how strong this support is, considering the lax requirements in order to participate in the initiative. The lack of commitment required for non-core participation, for example, is reflected in the agreement that participating states are merely encouraged to:

Formally commit to and publicly endorse, if possible, the Statement of Principles;

Review and provide information on current national legal authorities and indicate willingness to strengthen authorities as appropriate;

Identify specific national assets that might contribute to PSI efforts;

Provide points of contact for interdiction requests;

Be willing to actively participate in PSI interdiction training exercises and actual operations as they arise;

Be willing to consider signing relevant agreements or to otherwise establish a concrete basis for cooperation with PSI efforts.⁴³

In spite of the lack of deep commitment required for the majority of participating states, PSI is significant simply because of the economic and political weight of the countries that are core members, and most importantly, the effort that the United States has invested in promoting PSI worldwide.

The PSI, however, is not a formal program, law, or institution governed by a centralised organisation. At Rather, it is simply is a loose agreement between countries to abide by the Statement of Interdiction Principles, which itself only vaguely refers for justification to the Implementation of the UN Security Council Presidential Statement of January 1992 and recent statements of the G8 and the European Union. As a loose agreement between executives of participating nations, the PSI is not codified in any participating country's laws nor are any of its activities earmarked in any participating country's budget. The lack of certainty over the legal status of PSI in international and domestic laws possibly puts it in a precarious position which may make political and policy considerations of paramount importance for the future sustainability of the measure. Nonetheless, the United States has placed PSI at the forefront of non-proliferation efforts, especially as related to recent events connected with North Korea.

The PSI introduced several significant innovations within the context of international law when it was introduced. Among them was authorising participants to counter the proliferation of not only weapons of mass destruction (WMD) but also their delivery systems. This led to the UN Security Council to adopt Resolution 1540 on 28 April 2004, which explicitly prohibits states from assisting non-state actors from acquiring or developing WMD delivery systems as well as WMD.⁴⁹ Acting under Chapter VII of the UN Charter, the Security Council's action represented the first globally comprehensive ban on the proliferation of WMD, including a ban on WMD delivery systems.⁵⁰ By explicitly referring to WMD and their means of delivery as well as related materials, Resolution 1540 moves beyond the *Treaty on the Non-Proliferation of Nuclear Weapons 1968*⁵¹, the *Convention on the Prohibition of*

the Development, Production and Stockpiling and Use of Chemical Weapons and on their Destruction 1993⁵² and the Convention for the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction 1972⁵³ all of which fail to prohibit means of delivery of WMD, even if WMD themselves are prohibited by these older sources of international law.54 The PSI also foreshadowed Security Council action by directly acknowledging the threat of non-state actors in WMD proliferation. Resolution 1540 calls on all states to take action to prevent non-state actors form acquiring WMD, specifically for 'terrorist purposes'.55 It is only the second Security Council resolution to invoke Chapter VII of the UN Charter to require nations to take action against a general, rather than specific, threat to international peace and security.⁵⁶ The first resolution to order Chapter VII compulsory action against a general threat - also targeting the threat of terrorism - is Resolution 1373, passed days after 11 September 2001.⁵⁷ In 2006, Resolution 1673 was passed, which reiterates the commitment of the Security Council to the objectives of Resolution 1540 and extends the mandate of the Resolution 1540 Committee to 27 April 2008.⁵⁸

As noteworthy as the above issues are in international law, the most innovative and controversial effect that the PSI has had on international law is the challenge to the traditional notion of freedom on the high seas. Although nowhere in the Statement of Interdiction Principles is the right to freedom on the high seas explicitly discarded or questioned, the PSI was indeed crafted as a response to what has been seen as an easily exploitable right of the traditional international maritime regime. The right of innocent passage has, since the time of Hugo Grotius, been understood as a bedrock principle of international law. This principle of customary international law was specified and codified with the adoption of the LOSC. It is the initiative's challenge to the nearly universally accepted principle of innocent passage that gives the PSI its most remarkable characteristic. Ironically, it is the freedom of the high seas enjoyed by naval forces that is credited for giving naval forces their effectiveness in detecting and assessing transnational threats, since the freedom of the high seas gives naval vessels unobstructed sailing.⁵⁹ Indeed, in the 1970s, during the negotiations that led to the drafting of LOSC, the United States and Soviet Union clashed with Indonesia and Malaysia over the extent of passage rights in the Malacca Strait. The littoral states pushed for recognition of innocent passage through the strait, which ultimately gives sovereignty of the strait to the littoral states, but the United States and Soviet Union were able to win recognition of the far more permissive 'transit passage', which guarantees the passage of vessels through straits.60

Now in the era of the PSI, sovereignty issues in the Malacca Strait have come to the fore again. In a slight twist from the 1970s, when the United States argued for unfettered transit passage, today the United States is advocating the right to interdict and board vessels that are suspected of carrying WMD. Singapore has given support to the PSI; however, Malaysia and Indonesia have expressed opposition to the initiative, citing concerns about sovereignty or loss of 'control' through the strait.⁶¹

In the wake of 11 September 2001, stepped-up naval patrols in the Malacca Strait by the United States, Japan, and India created tension with Malaysia and Indonesia, who, at best, saw this demonstration of sea power as unnecessary sabre-rattling. Finally, as an alternative to participating in the PSI, Malaysia and Indonesia agreed to work with Singapore to form the Trilateral Coordinated Patrol, an effort in which each country patrols its respective territorial waters. The first patrols took place in July 2004 and the results thus far have not exceeded expectations. Due likely to sovereignty concerns, the trilateral agreement does not include a 'hot-pursuit' provision that expressly permits patrol vessels of one state to pursue into another's territorial waters. This has limited the potential effectiveness of the patrols.

If critics fault the Trilateral Coordinated Patrol for exercising excessive caution in deference to traditional notions of sovereignty and international law, the PSI offers itself as an option that has never been accused of being too conservative in its operation within the framework of international law. Unsurprisingly, criticism of the PSI has centred on the limits that PSI must abide by so as to remain within customary international law and international convention. The recent announcement by South Korea that it would not join PSI because of worries over the initiative's legality, in spite of a preceding UN Security Council resolution that the United States has claimed supports the PSI, and may cast further doubt on the perception of its compatibility with international law.

Even more positive assessments of the PSI, however, have acknowledged the challenge it poses for traditional understandings of international law, suggesting that tensions between it and the general principles of international law are all but inevitable. This is been lauded by internationally politically important sources. In explicitly referring to the PSI, the UN Report of the Secretary General's High-Level Panel on Threats, Challenges and Change states, 'We believe that all States should join this initiative.' This report was followed by a speech made by UN Secretary-General Kofi Annan who said, 'I applaud the efforts of the Proliferation Security Initiative to fill a gap in our defenses.'

It is precisely the maritime security gap in the traditional understanding of international law – exploited by WMD traffickers – that the PSI attempts to fill. In a sense, it may be seen as filling a gap where previously no law existed, and thus instead of viewing it as a threat to LOSC-enumerated due process rights on the high seas, the PSI may be interpreted as a means of filling a void where there has been virtual anarchy, which has only become more dangerous as the availability of WMD increases. In fact, the PSI may fit within the international law exception of LOSC Article 110, 'Except where acts of interference derive from powers conferred by treaty ...'. As the practical enforcement mechanism of Security Council Resolution 1540, which finally does address the gap in international law concerning proliferation of WMD delivery systems, 71 a not unreasonable argument can be made that the PSI is a part of 'hard' international law that fits within the LOSC Article 110 'exception'.

The PSI recently received a further boost in international acceptance and possible legal justification with the revision in October 2005 of the *Convention for*

the Suppression of Unlawful Acts Against the Safety of Maritime Navigation 1988 (SUA Convention) and its related Protocol. The revision began as an effort by the International Maritime Organization (IMO) Legal Committee to evaluate the relevance of the SUA Convention and Protocol in light of heightened terrorism concerns, in compliance with Assembly resolution Article 924(22). The revised SUA Convention provides legal procedures for the boarding of ships on the high seas for the purpose of preventing maritime attacks that are characteristic of terrorism and for interdicting the transport of WMD materials. Although the ship-boarding measures of the revised SUA Convention can only be undertaken with the express consent of the flag state. Consistent with traditional international law – it may signal a new direction or expectation in maritime security which may alter norms in favour of the PSI.

The issue that is relevant, though, is how to define goods that may be used for the production or facilitation of WMD. The Statement of Interdiction Principles calls for the 'interdiction of cargoes of WMD, their delivery systems, or related materials.'⁷⁶ Security Council Resolution 1540 echoes the objectives of PSI by requiring states to not only prohibit the proliferation of WMD, but also related goods:

Acting under Chapter VII of the Charter of the United Nations, Decides that all States shall refrain from providing any form or support to non-State actors that attempt to develop, acquire, manufacture, possess, transport, transfer or use nuclear, chemical or biological weapons and their means of delivery.⁷⁷

The 'means of delivery' and 'related materials' comprise an undefined category that may include a wide range of goods. This point has been made by critics of the revised SUA Convention and Protocol, which through the so-called dual-use provision, makes it a violation of the convention to transport 'any equipment, materials, or software or related technology that significantly contributes to the designs, manufacture or delivery of a biological, chemical or nuclear weapon' if such goods will be used for WMD proliferation.⁷⁸ The uncertainty over what constitutes 'related materials', 'related technology', and 'means of delivery' places dual-use technologies in a precarious legal position, and consequently the countries that trade in such technologies are left with unpredictability.⁷⁹ Considering that nearly 95 per cent of ingredients used to create WMD are dual-use, the question of discerning between legitimate trade from unsavoury proliferation has no easy answers.⁸⁰

As a measure that attempts to address maritime terrorism concerns, the PSI is an ambitious effort that pushes international law in sometimes uncomfortable directions. As equally important, though, is the political dimension of the PSI, for even if reasonable articulation can be given for the compatibility of it with international law, its adoption – in both practice as well as formal diplomatic agreement – is dependent on the acceptance of the measure from a policy perspective. In the Asia-Pacific region, important nations like Australia, Singapore, and Japan have shown support for it – albeit the level of support from Japan has been questioned

- but other critical nations, like Malaysia, Indonesia, China, and South Korea, have questioned it. In light of the patchwork acceptance of the PSI and its controversial place within international law, it may not be prudent to rely on it as the sole, or even primary, maritime counter-terrorism measure available in Asia. For this reason, more subtle and established measures must continue to play a significant role in maritime security.

Tokyo MOU

One such quiet effort that has international precedent is port state control. Regional efforts to enforce international maritime standards have been measurably successful for the past couple decades. In 1982, several important European coastal states entered into the Paris Memorandum of Understanding on Port State Control (Paris MOU).81 The Paris MOU gives each of the member states 'port state control' over vessels that enter their ports in order to ensure that the vessels are in compliance with international maritime obligations, including the International Convention for the Safety of Life at Sea 1974 (SOLAS).82 Port state control is understood as a legal supplement to the more traditional means of enforcement of maritime standards: flag state control and the jurisdiction of coastal states to police their waters. 83 As a supplementary legal measure, port state control was created not to replace the more traditional means of exerting authority over ships, or even as a primary means of doing so - the ultimate responsibility is still left to the flag state - but rather it is intended to assist the traditional measures when they fall short in practice.84

Since the adoption of the Paris MOU, regional MOUs have been established in many parts of the world, including the Carribean MOU, Vina del Mar Agreement (Latin America), Indian Ocean MOU, Mediterranean MOU, and the Black Sea MOU.85 In East Asia, the Tokyo MOU, which includes as its members the major port nations along the Pacific Ocean, is considered one of the principal regional port state control MOUs, along with the Paris MOU.86 The Tokyo MOU has 18 member authorities and several observers.⁸⁷ Established in 1994, the Secretariat is based in Tokyo, with the main duties of serving the Port State Control (PSC) Committee and other meetings, organising PSC officers training courses and other seminars, conducting research and analysis of the PSC inspection data in the region, collecting and disseminating information regarding PSC for the participating authorities, and assisting in providing technical assistance.88 Like its predecessor the Paris MOU, the Tokyo MOU derives its authority from several international maritime conventions, including SOLAS.⁸⁹ Traditionally, the Tokyo MOU has primarily focused on labour and environmental safety of vessels entering into port. With the adoption of the ISPS Code as a part of SOLAS, however, the Tokyo MOU may have taken on important authority in the field of maritime counter-terrorism, even if counter-terrorism concerns were not significant in the formation of the Tokyo MOU.

The IMO-sponsored ISPS Code represents the only significant maritime security measure that has been adopted by an international body. 90 Although the IMO does not explicitly have a mandate to address the issue of maritime security,

its history in responding to maritime safety threats and its expansive application of Article 1 of the IMO Convention provide ample sources of international recognition of the IMO's authority in matters pertaining to maritime security. Acting on such recognised competence, the IMO announced the establishment of the ISPS Code in December 2002, and it entered into force in July 2004. The 155 Contracting Parties to SOLAS have a legal obligation to comply with the ISPS Code since the ISPS Code is a regime from a number of amendments to the SOLAS Convention. Remarkably, the amendments to the SOLAS Convention resulting in the ISPS Code were signed by all Contracting Parties at their inception. Subsequently, the UN General Assembly positively recognised the ISPS Code as a means to promote safe and secure shipping.

The ISPS Code was crafted by dividing SOLAS Chapter XI into two parts, Chapter XI-1 for Special Measures to Enhance Maritime Safety and a new Chapter XI-2 for Special Measures to Enhance Maritime Security.96 The ISPS Code is found in the new Chapter XI-2, whereby the ISPS Code itself is divided into two parts: Part (A) spells out compulsory obligations of all Contracting Parties to SOLAS and Part (B) provides non-compulsory recommendations for implementing the provisions of Part (A) and of SOLAS XI-2.97 The wide reach of the compulsory measures is evident by the fact that over 98 per cent of the world's international fleet falls under the range of Part (A).98 The new Chapter XI-2 also distinguishes between three threat levels to maritime security: level 1 indicates a normal level of risk and is the minimum level of security preparedness for ships and ports at all times; level 2 indicates a heightened security threat; and level 3 indicates a probable or imminent threat and should only be applied in exceptional circumstances.⁹⁹ Additional amendments to SOLAS include more stringent requirements on ships to be equipped with Automatic Information Systems (AIS). 100 increased visibility of the Ship Identification Number (SIN) on the outside of vessels and in the engine area, 101 maintenance of a Continuous Synopsis Record (CSR) on board ships to record ship history and identity,102 and a Ship Security Alert System (SSAS) that can transmit an alert from ship to shore. 103

The ISPS Code places additional burdens on ships and ports. In order for a ship to be eligible for an International Ship Security Certificate (ISSC), which is administered by the flag state of the ship or a classification society, the ISPS Code requires several measures to be undertaken. A Company Security Officer (CSO) must be designated to take ultimate responsibility for ship and company compliance with the IMO security rules and exercise duties such as managing Security Assessments, coordinating the Ship Security Plan, serving as liaison with ships on security issues, maintaining the security system, and ensuring security verifications. Ship Security Assessments (SSA) must be carried out by ship owners and operators periodically to identify potential threats and vulnerable points. Subsequent to the SSA, a Ship Security Plan (SSP) must be submitted to the ship's flag state for approval, clearly stating the vessel's chain of command, response plans to threats, and specific crew procedures. A Ship Security Officer

(SSO) must be designated for each ship, and is responsible for implementing the SSP on board, report incidents, and communicating with the CSO and Port Security Officer.¹⁰⁷ Ships must also be able to produce records of at least the last ten calls at ports along with security related information.¹⁰⁸ To keep security needs up to date, the ISPS Code mandates that security drills be held on board at least once every three months and a full-scale drill involving the CSO at least once a year.¹⁰⁹

The relatively arduous obligations the ISPS Code places on ships must, of course, be monitored to be effective. The Tokyo MOU, which already possesses widely accepted political and legal legitimacy in the Asia-Pacific region, very well may be one of the most natural multilateral agreements to see to it that the ISPS Code is enforced in the region. In this respect, the Tokyo MOU has the political and legal capability to be a key counter-terrorism force in Asia, in spite of the fact that it was not designed to play such a role at its inception. This promising potential from the Tokyo MOU, however, must be kept in perspective. After all, regional MOUs for port state control will not resolve all problems associated with flags of convenience. Ships with substandard conditions are still free to sail to countries with less stringent rules or enforcement of such rules. 110 Nonetheless, the fact that the Tokyo MOU has support from a broad cross-section of nations in Asia means that its reach is greater than the PSI. Additionally, unlike ReCAAP which is legally ambiguous on the matter of counter-terrorism, the Tokyo MOU has an expressly articulated counter-terrorism component in the form of the ISPS Code. For these reasons, the port state control agreement may be an essential tool in combating maritime terrorism even though it ostensibly has less of a counter-terrorism angle than other initiatives that were conceived with maritime security firmly in mind.

Conclusion

An examination of ReCAAP, the PSI, and the Tokyo MOU reveals several important and telling lessons about the practical implementation of maritime counterterrorism schemes in East Asia. First, any assessment on the efficacy of such agreements must take into account both the legal and policy dimensions involved. In this respect, the PSI is the effort that is least legally ambiguous in its counterterrorism objectives, but it is also fraught with significant political obstacles by important Asian governments who view it as a threat to their overall maritime policy. Moreover, the direct and bold claims of the PSI and is supporters risk putting it in conflict with more traditional notions of public international law. In contrast, the modest and relatively timid approach taken by ReCAAP, especially in its vagueness over whether counter-terrorism cooperation can fit within its language, leaves some room for political manoeuvring and legal reinterpretations over what actions it permits. The ambiguous scope of ReCAAP; however, is its liability as well, since states can always fall back on a more modest reading of ReCAAP when they would rather not pursue terrorism more aggressively, thereby diminishing the predictability and reliability of the agreement. Compared to the PSI and ReCAAP, the Tokyo MOU is the multilateral effort least likely to be intuitively viewed as a tool for maritime counter-terrorism. Its genesis, after all, lies in labour and environmental protections for vessels calling in port. The adoption of the ISPS Code in the context of SOLAS, though, has essentially bootstrapped counter-terrorism obligations on the well established and internationally accepted agreement. This subtle approach to counter-terrorism measures enjoys the advantages of legitimately placing clearly expressed legal obligations on the member authorities and having such legal obligations spread out over a broad cross-section of important states throughout the Asia-Pacific region.

The study of maritime counter-terrorism measures in East Asia benefits not only the region in determining what kind of balance works best, but the global impact East Asia has on maritime interests means that an assessment of the region serves as a guide for the rest of the world. Moreover, the presence of the PSI the world over and prevalence of port state control agreements in other regions makes the Asian experience on these two efforts particularly relevant for better understanding the strengths and weaknesses of maritime counter-terrorism at a global perspective. For the foreseeable future, due to the region's high commercial and strategic importance, East Asia will continue to serve as a model and case study for maritime counter-terrorism measures; and so it will behove international lawyers and public policy makers alike to pay attention to the evolution of ReCAAP, the PSI, and the Tokyo MOU as East Asia sails through the first decade of the 21st century.

PART 4 ~ Southeast Asia

Operationalising Cooperative Regional Maritime Security

Chew Men Leong

The use of the sea as a conduit for trade and interaction has had an enduring history. In the age of exploration, merchants sourced the produce of foreign lands via the oceans, and whole cultures were transplanted by seafaring pilgrims. Fast-forward a few hundred years to now, and the forces of globalisation have enabled a resurgence in maritime trade and energy flows. Nowhere in the world is this more true than in the Asia-Pacific region. This is a region through which over 30 per cent of the world's commerce, half the world's oil, and 80 per cent of the oil bound for China and Japan are carried afloat. The sea lines of communication in this region are hence critical lifelines not only for the regional littoral states, but also for stakeholders around the globe.

However, globalisation has also greatly increased the potential effects posed by threats to maritime security. Most of us here would be familiar with the attacks on the USS *Cole* in Aden, the MV *Limburg* off the Yemeni coast and the Al Basrah Oil terminal in Iraq. Specific to this region, the menace of piracy and other threats to the security of merchant shipping caused Lloyd's Joint War Committee to add the Malacca Strait to its list of war risk areas in 2005. The effects of the cost increases in the maritime and shipping industry were felt worldwide. These incidents serve to remind us that threats to maritime security carry both strategic and economic consequences, and have a ripple effect far beyond the immediate vicinity. Hence I am sure my compatriots in the region, and indeed most of you here today, will agree with me that countries need to work together to make our seas safe and secure.

But to say that no man – or nation – is an island, is often easier said than done. In a region of such vast geopolitical differences and nuances, such as ours, what sort of foundation do we need to become and remain good team mates?

Let me suggest that the foundation stone of effective collaboration is good communication, beginning with the candid sharing of perspectives in a bid to reach consensus – such as has already been observed in this region. Maritime security has been discussed extensively over the past two years in a number of fora, including the ASEAN Regional Forum, the Western Pacific Naval Symposium (WPNS), the Five Power Defence Arrangements (FPDA), and at the IISS-sponsored Shangri-La Dialogue. The frank discussions have helped the region and partner nations to progress from understanding to concrete cooperative efforts.

The Shangri-la Dialogue in particular marked a milestone in which consensus was achieved on three principles for maritime security cooperation in the Malacca Strait. First, the primary responsibility of maritime security in the Malacca Strait lies with the littoral states. Second, there is a role that international community, agencies like the International Maritime Organization and major user states, can

play. And third, measures taken must be in accordance with international law and with due respect to the sovereignty of the littoral states.

Having achieved this consensus, we were able to move quickly from principles to cooperative action. In July 2004, Indonesia, Malaysia and Singapore bolstered existing bilateral arrangements with the launch of the trilateral Malacca Strait Sea Patrols (MSSP). These maritime patrols operate along the entire length of the Malacca and Singapore straits, and contribute towards the collective ability to respond to developing situations in the straits.

This was followed in September 2005 by the 'Eyes in the Sky' maritime air patrols, an idea that was raised by Malaysian Deputy Prime Minister and Defence Minister, Dato' Sri Najib Tun Razak. The 'Eyes in the Sky' initiative enables participating states to optimise maritime air surveillance through coordination, and has an innovative design which ensures that the littoral states are in the driver's seat while opening up opportunities for the participation of non-littoral states in the future. Collectively, these two initiatives form part of the broader framework of the Malacca Strait Patrol (MSP). The numbers speak for its efficacy. The initiative has reduced the number of piracy incidents in the Malacca Strait from a high of 38 in 2004, to 11 in 2006, and still further to just seven in 2007. This prompted the removal of the Malacca Strait from Lloyd's list of war risk areas in August 2006, just a year after its initial inclusion.

Riding on these concrete successes, an MSP Intelligence Exchange Group was formed among the three participating states in 2006 to support the sea and air patrols, leading to the development of an information sharing platform called the Malacca Strait Patrol Info-System or MSP-IS, of which Thailand is now also a partner. These info-sharing efforts were quick to bear fruit. In September 2007, MT *Kraton*, a tanker hijacked in the waters off Sumatra, was successfully interdicted by the Indonesian authorities after the participating states shared information on the incident. Collaboration in the MSP is now proceeding to the next level as we continue operational information sharing trials with the MSP-IS and look forward to Thailand's future participation in the patrols.

Another way to build greater capacity for collaboration and nurture a foundation of trust is to extend the breadth and depth of the multilateral exercises amongst regional and extra-regional navies. The progress in this area in recent years has been encouraging. Four years ago, the Ministers of the FPDA countries agreed to expand its activities to address non-conventional threats. Since then, maritime security serials have been incorporated regularly in FPDA exercises such as BERSAMA PADU. The WPNS is another important forum for furthering maritime security cooperation. Bringing together 18 member and 6 observer Asia-Pacific navies, the WPNS has contributed significantly to building capacity and developing interoperability for maritime security cooperation in the region. The frank dialogue at various seminars and workshops has increased the level of confidence and mutual understanding among its members. Exercises such as the Multilateral Sea Exercise have allowed many participating navies from diverse backgrounds to gather and

operate together out at sea. Regular Maritime Security Information Exchange Seminars have been conducted to share perspectives, knowledge and experience in the area of maritime security. Under the auspices of the WPNS, the Republic of Singapore Navy (RSN) has developed and introduced the use of the Regional Maritime Information Exchange (ReMIX) system, a secure Internet-based platform to facilitate real-time info-sharing and collaboration among the operational staff of WPNS navies.

So it seems that impressive progress has been made in maritime cooperation. It can be tempting to rest on one's laurels. But the truth is, despite these successes, we are still several steps away from achieving comprehensive maritime domain awareness in the region – that is, being able to see and sense what is moving on the water. Such comprehensive awareness is vital for building the capacity to deal with more complex maritime security problems, which can involve a sophisticated enemy capable of slipping through the gaps where the jurisdiction of one nation ends and another begins.

No single navy can achieve 100 per cent comprehensive awareness alone. Yet the level of information sharing required to reach such a state of awareness will present a paradoxical tension – namely, the issue of information security. Information sharing may reveal sensitive sources or capabilities that some partners may need to safeguard or make privy as a matter of national interest and sovereignty. Therefore, any information sharing system must have inbuilt safeguards, based on mutually-accepted 'ground rules', such that partners can continue to engage one another in full confidence.

Recognising this need to balance maritime security demands with national sensitivities, the RSN is doing its part to facilitate collaborative information sharing among navies and relevant maritime agencies. With feedback from WPNS navies' operational users of ReMIX, the system has been enhanced to include a regional situation picture, a shipping database, and a sense-making tool. In fact, in January 2008, operational users from WPNS navies were given a preview of the enhanced ReMIX system at the ReMIX Training Seminar held in Singapore.

The inclusion of the shipping database and sense-making elements in the enhanced ReMIX system are particularly salient in today's maritime environment. Since neutral commercial shipping makes up the bulk of maritime traffic and is also particularly vulnerable to becoming targets or instruments of illegal acts, the sharing of 'white' shipping database information greatly improves overall awareness of the situation at sea and may even help to pre-empt a maritime incident. To this end, the RSN is developing a database system designed to collate and fuse shipping information from open sources, information sharing partners and other intelligence sources. Called the Open and Analysed Shipping Info-System (OASIS), it will be capable of displaying both real-time and historical trend data in a common maritime picture. Once it is operational, the RSN will begin sharing this database with likeminded partners.

However, without a tool to make sense of the vast volume of information available, one would be just as lost as if there were too little information. Hence sense-making is the other critical component of the information sharing equation. As part of our efforts to help develop global sense-making protocols, as well as to gain relevant expertise, Singapore has participated in three limited objective experiments in collaboration with the US Joint Forces Command. The findings from these experiments will help to enhance the RSN's own Sense-Making Analysis and Research Tool (SMART), and complement the OASIS database as well.

With the advent of more capable information sharing systems, there must be complementary growth in the frameworks and facilities that enable closer multilateral cooperation. There are already a number of initiatives, involving both regional and external parties that pave the way for further collaboration. Since 2002, the SEACAT series of exercises involving the US Navy and Southeast Asian navies have helped to enhance information sharing and coordination of maritime security responses. Also, the *Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia* (ReCAAP) facilitates the exchange of information on piracy and armed robbery through its Information Sharing Centre based in Singapore. In addition, the Cooperative Maritime Forces Pacific system put forth by the US Navy during SEACAT and RIMPAC 2006 promises much improved situational awareness during multilateral operations.

In the same vein, and in order to provide a purpose-built regional geographical base for information sharing and multilateral cooperation, Singapore will establish the Changi Command and Control Centre in 2009. This centre will house an Information Fusion Centre, and a Multinational Operations and Exercises Centre (MOEC). Using the OASIS and SMART platforms, the Inormation Fusion Centre will facilitate the consolidation and distribution of operational knowledge shared by partner navies and maritime agencies. The MOEC will serve a complementary purpose as a dedicated base tailored to facilitate multilateral exercises and operations. The Changi Command and Control Centre represents Singapore's continued commitment to promoting regional security and, together with the support and participation of partners in the region, will serve our shared interests in maritime security.

In conclusion, no single country alone can guarantee the safety and security of the maritime domain. The complex and trans-boundary nature of modern maritime security threats necessitates the sharing of information across national boundaries and requires a high level of interoperability for the effective engagement of threats. Therefore, the thrust of maritime security cooperation from here on out should be twofold: first, to build robust and versatile information sharing systems that account for inherent sensitivities, and second, to improve the practical frameworks for multilateral cooperation. Moving ahead, Singapore and the RSN will continue to work together with like-minded countries and navies to further efforts in these spheres, so as to ensure safe and secure seas for all.

Pirates, Renegades, and Fishermen: Reassessing the Dynamics of Maritime Piracy in the Malacca Strait

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A great deal of research has been conducted on piracy in the Malacca Strait since the late 1990s. However, most of these studies concentrated fundamentally on the verifiable effects or outward manifestations of piracv. This is because up until the turn of the 21st century, most of these studies invariably depended on statistics provided by the International Maritime Bureau's (IMB) Piracy Reporting Centre as their primary data source. The issue that most of these studies failed to address was the dynamics and roots of piracy, as well as the identities of the pirates. Another key question that remained unanswered was why piracy has been endemic and persistent in the Malacca Strait for at least two decades. Given these shortcomings, it was felt that a more meaningful analysis of the piracy problem in the Malacca Strait might be obtained by using primary source data. For various reasons, to be dealt with in more detail in the next section, it was decided to concentrate on the key fishing community of Hutan Melintang on the west coast of peninsular Malaysia (in Perak, 3°53' North 100°56' East). This community has been the victim of sustained piracy attacks since the 1980s. By focusing on this one community, I hoped that new insights could be obtained on the dynamics and persistence of Malacca Strait piracy. Research in Hutan Melintang was carried out in two phases - 2003-05, and 2006-07.

This empirical research revealed several important findings. The first was that, as I suspected, pirates seem to attack local craft more often than international shipping. As such, local craft provide a major source of sustainable income for pirates. Second, maritime predations by rogue officials of Indonesian enforcement agencies were apparently as serious (if not more so) than attacks by pirates. The third observation is that poor governance not only allowed the piracy-maritime predation problem to thrive in the Malacca Strait, but also enabled the establishment of an underground economy in Sumatra based on the piracy-fishing nexus. Finally, evidence provided by Hutan Melintang fishers indicates that members of the Gerakan Aceh Merdeka (GAM - Free Aceh Movement) were heavily involved in organised piracy, including a maritime protection syndicate, up to 2005. The fishers claim that piracy attacks against them ceased completely after the 2005 Indonesia-GAM truce. However, rogue Indonesian maritime enforcement agencies officials continue to seize their trawlers and extort ransom from them up to this time of writing. One question that this research therefore raises is whether the drastic fall in the number of piracy incidents reported by the IMB in the Malacca Strait since

2005 is the result of the 'landmark naval cooperation in July 2005',² or is it the result of the Indonesia-GAM truce?

This paper is divided into six sections. Following this introduction, section two explains what is new about this research and outlines its key findings. The third section introduces the piracy victims of Hutan Melintang, the largest fishing community in Malaysia. Section four traces the history of piracy against these fishers and how it evolved from simple robberies in the 1980s to organised syndicates by the 21st century. Section five deals with maritime predations committed by rogue members of Indonesia's maritime enforcement agencies. The paper argues that the current maritime boundary dispute in the Malacca Strait between Malaysia and Indonesia has allowed rogue enforcement agency officials to exploit the situation by extorting ransom from Hutan Melintang fishers. Section six concludes that the primary cause of piracy in the Malacca Strait stems from poor governance and corruption in Sumatra, and that maritime patrols alone cannot solve the problem.

Research on Malacca Strait Maritime Predations

There has been a great deal of controversy over the definition and use of the terms piracy, political piracy, sea robberies, and terrorism. While the IMB considers 'piracy' to include all crimes committed at sea and in port,³ the *United Nations Convention on the Law of the Sea 1982* (LOSC) confines piracy only to crimes committed on the high sea by private individuals for private gain.⁴ From the point of the fishermen of Hutan Melintang, however, such semantic squabbles are immaterial because they consider themselves to be victims of predatory acts, irrespective of how these acts are defined, committed by both private criminals and rogue elements of the Indonesian enforcement agencies. Thus this paper will use the more inclusive term 'maritime predations' to cover attacks by both criminals and rogue elements of enforcement agencies.

The Malacca Strait has been regarded as one of the most pirate-infested areas of the world since the 1990s. The apparent vulnerability of the strait was underlined by the June 2005 announcement by Lloyd's Joint War Committee (JWC) that the entire waterway was a zone at risk from 'war, strikes, terrorism and related perils.' This 'war zone' listing resulted from a sudden and 'massive rise' in the number of kidnap-for-ransom cases and the increasing use of firearms and violence by pirates in 2004 and 2005. Although the war zone listing was dropped in August 2006, the entire episode showed the international concern over the threats posed by non-state actors, especially pirates, in the strait. In addition, it also illustrated the importance of the Malacca Strait for international maritime traffic.

THE 'INTERNATIONALIST' APPROACH

The fact that the strait is a key sea line of communication used by international shipping has resulted in what I term an 'internationalist' focus on the strait and its problems. In short, most problems in the strait, including the issue of piracy,

are viewed through international lenses. Thus, this conventional, internationalist approach to Malacca Strait piracy has focused mainly on attacks against international shipping transiting the waterway, as reflected in the data on piracy incidents collated by the IMB. More than that, past attempts to analyse the piracy problem have usually concentrated on capturing verifiable details – for instance, who the victims are, types of vessels attacked, number of pirates involved, the degree of violence used, weapons employed, and the locations of the incidents.⁶ Although such an approach should theoretically help in establishing patterns of attacks, the reality is that patterns differ from year to year.⁷ In fact, most current writings on piracy in the region tend to adopt a more policy-oriented and prescriptive stance.⁸

However, I argue that while the problem of maritime predations in the Malacca Strait has generated a slew of policy-oriented writings, the issue has not been studied in depth. It is only in the last few years that a handful of scholars have embarked on a number of serious primary studies. This ongoing research should generate new insights into the problem of piracy, but until these findings are more widely disseminated, the understanding of piracy in Southeast Asia in general and the Malacca Strait in particular is still somewhat superficial. For instance, most of the policy studies to date have depended mainly on secondary sources, such as reports from national enforcement agencies, and in particular, on the IMB for data on piracy incidents. In this regard, the IMB has done a commendable job of keeping a record of reported attacks, usually on international commercial vessels. However, attacks on local craft, such as fishing boats, barges and small barter craft, are rarely reported to the IMB. In this sense, the IMB, through no fault of its own, has been under reporting maritime predations in the Malacca Strait. Nevertheless, numbers are not everything. In fact, a fixation with numbers can distract researchers from developing deeper insights into, and a better understanding of, the dynamics of modern piracy.

A natural consequence of the current internationalist approach in analysing the piracy problem is an emphasis on preventive, prophylactic measures, with the victims of piracy pressing for more maritime patrols and for the littoral states to undertake more coordinated measures at sea to suppress piracy. More significant, there have been attempts since 2001 to conflate piracy with terrorism, with Singapore taking a leading role in underlining the dangers of terrorism-cum-piracy.9 In addition, most proponents of the internationalist approach pay little attention to the roots and dynamics of piracy, which highlight another dimension to Malacca Strait piracy that has salience for how policymakers deal with it. Piracy in the waterway is not a phenomenon that started only in the 1990s, becoming especially serious after the 1997 Asian financial crisis, which, by contributing to sharply rising poverty in countries such as Indonesia, led to an increase in piracy in Indonesian waters as some have claimed.¹⁰ Moreover, the tendency to see the increasing use of firearms and violence by pirates since 2000 as an indication that they are acting more and more like terrorists fails to place piracy in what I argue to be its particular historic and socio-economic context. In fact, Malacca Strait maritime predators have

been attacking local craft, such as barter boats and fishing vessels since at least the 1980s. These attacks are probably more numerous and certainly more persistent and sustained than attacks against international shipping.

UNDERSTANDING THE DYNAMICS AND SOURCES OF PIRACY

I felt very strongly therefore that there was a need to understand the dynamics and sources of piracy in the straits, and to provide new and more meaningful insights into the problem. One key puzzle has always been the identity of the pirates. Who are they? Where do they come from? Who supports them? Why is piracy such a perennial problem in the Malacca Strait? Some analysts have tried to answer the questions by trying to interview pirates themselves. While such an approach is highly commendable, it has certain limitations. The first is that of the identity of the self-professed pirates. Are they genuine pirates, or are they imposters out to make quick money? The second problem has to do with the fact that the number of pirates interviewed, assuming that they are all genuine, is usually limited and insufficient to provide a meaningful sample.¹¹

If it is not practical to gather reliable, long-term data from pirates, then perhaps a more accurate assessment of the piracy problem in the Malacca Strait might be obtained from the victims themselves. However, one problem of using IMB data is that the victims are not only random, but come from a very wide variety of backgrounds, countries, and diverse shipping lines. I also felt that that Malacca Strait pirates could not have sustained themselves over the years by depending on transient international shipping. An effort was therefore made to identify a significant group of victims that would meet the following criteria:

- they must be a community of victims with similar backgrounds and shared experiences of piracy
- they must be a sizeable group of victims so that sufficient data would be available for trends to be established
- ideally, the community's experience of piracy attacks should also stretch more than five years for meaningful time-series analysis
- the victims should not be transients but 'residents' of the Malacca Strait who spend most of their time in the waterway.

Tracing maritime predations against a particular community over a significant time period is important because it provides a historical perspective and understanding of piracy – linking the past with the present. In addition, it can provide insights into how piracy is sustained and therefore highlight how national authorities might more effectively contain it. Historically, piracy flourished in areas where state control and boundaries were disputed and state governance and administration weak or non-existent. Second, for piracy to flourish over the long term, a distinct market economy must exist. Successful maritime raiders also require strong logistical and administrative bases, usually underpinned by a *de facto* political structure, to thrive. The third point of note is that punitive expeditions by themselves

seldom succeeded in ending maritime predations. It is not enough to merely destroy pirates and their bases. The political and economic vacuum left behind must be supplanted by effective alternate economic systems and administrative structures that people can trust and identify with. The state, in short, must become a new and legitimate patron for the local populace, which previously had depended on the piratical market economy and owed allegiance to the piratical 'administration.' The persistence of predations against Malaysian trawler fishermen therefore prompts us to ask whether such acts of piracy are uncoordinated, spontaneous episodes of opportunistic predation, or whether, as with history, they reveal the existence of a sustainable, underground market economy centred on the fishing-piracy nexus.

KEY FINDINGS

My research yields three main findings that have salience for how the piracy problem could be addressed. The first is that piracy or maritime predation against fishers is very much an activity that is rooted in economics rather than ideology. Indeed, there is no evidence at all to indicate that terrorists are involved in attacks against fishers. Pirates also proved highly adaptable, ensuring that their predations were 'sustainable' and that it would not cripple the Hutan Melintang trawling industry irreparably, among other things. As Malaysian fishermen developed their fishing techniques by investing in larger boats and fishing farther offshore, the arms used by maritime predators changed from knives and machetes to powerful firearms, while the modes of attack developed from simple robberies, to ship hijacking to kidnap-for-ransom over the years. And as the costs of Malaysian fishing trawlers and their gear escalated over the years, the pirates proportionately increased the amount of ransom, compensation and protection money demanded. In short, the actions and reactions of both the pirates and the fishing community created – at least up to 2005 – a self-sustaining transnational underground market.

Second, piracy started out as a low-level, opportunistic criminal activity in the 1980s. However, from evidence provided by Hutan Melintang residents, it appeared that piracy had become a highly organised 'industry' with the GAM playing a central role by the 1990s. Very significantly, Hutan Melintang community leaders claim that there has not been a single pirate attack against their trawlers since the Indonesia-GAM peace agreement in 2005. The third finding is that weak or poor governance in the outlying areas of Sumatra has allowed maritime predations against Hutan Melintang fishers to become well-organised and to persist for over 30 years. Another very significant point is that not only are 'common' criminals involved in hijacking fishing vessels and extorting ransoms from their owners, but all the fishermen, fishing traders and equipment suppliers interviewed for this study were unanimous that rogue elements from Indonesian maritime enforcement agencies are also involved in maritime predations. Indeed, residents allege that while 'genuine' pirates have stopped attacking their trawlers since 2005, rogue

Indonesian officials continue to seize their boats and demand ransom for their release.

Overall, this study is important because it provides new insights into the dynamics of Malacca Strait maritime predations. The paper's findings suggest that such predations have been a sustainable economic activity, deeply embedded in eastern coastal Sumatra with long historical roots. This calls for a broader set of measures to tackle the 'piracy' problem beyond the current prophylactic emphasis on maritime patrols. Until 2005, the primary root of the maritime raiding problem in the Malacca Strait was the lack of effective government along the Sumatran coast coupled with the absence of viable, legitimate economic opportunities for coastal communities. Much like the drug eradication programs worldwide, measures to weed out piracy must include the provision of viable alternative employment or economic opportunities for coastal communities. In addition, governance reforms in Indonesia to address corruption in law enforcement and other public agencies and to provide more effective public administration in the outlying areas are equally vital. If poor governance has allowed the maritime predation problem to persist for more than 30 years, including the participation of rogue officials, then the present emphasis on more efficient and better coordinated patrols at sea is addressing only part of the problem. The fact that there are no pirate bands based on the Malaysian side of the strait (leaving aside ship hijacking rings which contract out the actual hijackings) suggests that economic development and effective administration and governance are key factors in addressing piracy in the Malacca Strait.¹²

Introducing the 'Silent Victims': Background of the Hutan Melintang Fishing Community

The Hutan Melintang fishing community was chosen as the initial case study for the analysis of long-term maritime predations in the Malacca Strait for two reasons - its economic significance as the primary focus of the fishing industry in Malaysia and its historical experience as a victim of maritime predations in one of the two major piracy zones in the strait.¹³ Of the three major fishing areas on the west coast of peninsular Malaysia, Hutan Melintang is the most important in terms of total tonnage and value of fish landings and the number of fishing boats and trawlers based in the area.¹⁴ Hutan Melintang has grown steadily as the most important base for Malacca Strait trawlers because of its more than 60 jetties that are accessible 24 hours a day, good loading and unloading facilities so that trawlers do not have to wait to land their catches, and an efficient infrastructure to support the fleet. Hutan Melintang has a population of 200,000 people¹⁵ and more than 900 fishing boats from the west coast of peninsular Malaysia are based there, of which almost 500 fish regularly offshore in the middle and northern approaches of the strait. When we consider that these 500 trawlers stay out for 10-day stretches at a time their contribution to the density of strait traffic is considerable.¹⁶ It is also the one fishing community that has suffered the most from maritime predations since the 1970s. Since the year 2000, maritime predations have averaged one a month.

For this case study of the Hutan Melintang fishing community, selective face-to-face interviews with members of the community who had been victims of maritime predations, or who have an overall understanding of the problem was deemed the most feasible. Comprehensive lists of questions in English and Mandarin were sent to community leaders in order to prepare them for the interviews as well as for them to suggest other members of the community who could be interviewed. All the interviews were conducted in the local Chinese dialect as all boat owners and fishing traders were Chinese. The following information was sought:

- number of attacks each year
- frequency, number, date and time of piracy attacks
- types of attacks and weapons used
- identity of the predators
- whether the attackers belonged to any organised groups
- · number of attackers in each incident
- losses incurred by the victims in each incident
- injuries and or fatalities sustained by the victims
- changes, if any, in the types and patterns of attacks
- when and whether the attack was reported to the Malaysian authorities
- subsequent follow-up action if any by the authorities
- how piracy/maritime predations have affected both the community in general and particular individuals
- how the community has coped with piracy/maritime predations in the past, the present, and in the expected future
- what kinds of help the community has received from the local authorities and local enforcement officials past and present
- what the community thinks should and can be done about piracy/maritime predations.

Maritime Predations: From Petty Criminals to Organised Syndicates

The strait is relatively shallow for most of its 500-nautical mile length, making it eminently suitable for bottom trawling. The primary fishing area of the Hutan Melintang fishermen is located between the middle to the northern entrance of the strait, which contains some of the richest fishing grounds of the waterway. The trawlers also operate near Sumatra, because the Malaysian-Indonesian maritime boundary agreements of the early 1970s had, from the view of Kuala Lumpur at least, given it control over a maritime space that extended close to the Acehnese coast. These boundary agreements were incomplete, leading to a Malaysia-Indonesia maritime dispute in the strait at the start of the 21st century. As we will see later, this dispute gave renegade Indonesian enforcement officials the excuse to harass and hold Hutan Melintang boats and fishers for ransom.

By the mid 1970s, fish stocks along the west coast of peninsular Malaysia had been severely depleted.¹⁷ In addition, the Fisheries Licensing Policy introduced in 1981 by Malaysia restricted larger fishing boats and their gear to the outer limits of

the fishing zones in an attempt to protect inshore, traditional artisanal fisheries. ¹⁸ The fishers of Hutan Melintang were therefore increasingly attracted to the richer fishing grounds towards the middle and north of the waterway, near Sumatra, which meant investing in larger boats and more sophisticated equipment. ¹⁹

These boats not only fished farther from the coast, but stayed out longer, with fishing trips lasting from a week to 10 days. Since they were now fishing near the Sumatran coast, the trawlers found themselves sharing the fishing grounds with small Indonesian 'longliners' or *kapal rawai* - boats using long lines of baited hooks normally manned by a crew of two. Some of these longliners, with three or four pirates hidden aboard, would approach the trawlers under the pretext of asking for bait or water. Once alongside, the pirates, armed with parangs (machetes), would rush the trawler and rob the crew. The Hutan Melintang fishers agreed that these early maritime predators were opportunistic, petty criminals who did not belong to organised syndicates. After the Malaysian trawlers refused to stop for the longliners, the pirates changed tactics. They would attack at night when the trawler would be anchored and its crew asleep. However, the Malaysian fishermen soon became wary of the sound of approaching Indonesian longliners whose engines apparently made a distinctive throbbing sound. They would thwart the pirates by switching on all the trawler lights. The maritime predators therefore resorted to drifting down to their prey using the prevailing currents, with their engines switched off. The late 1980s therefore saw the introduction of radars aboard Malaysian trawlers, not so much for navigation as for providing warning of approaching craft at night, especially pirate craft.20

GUNS, GOONS AND HIJACKERS: GAM AT WORK?

Indonesian maritime predators began to use firearms in the 1990s. The increasing use of assault rifles and other powerful firearms during this period is not surprising given the revival of the GAM armed rebellion in northern Sumatra towards the end of the 1980s, which resulted in an influx of weapons into Aceh. Indeed, although it was hard to verify, the fishers generally believed that these armed attackers were GAM members. These pirates not only possessed firearms but also were better organised with basic infrastructure such as safe havens. These pirates of the late 1980s and early 1990s had also progressed from straightforward robberies to ship hijacking. This was partly the result of the increasing value of trawlers, and the fact that fishermen began to carry less and less cash to deal with contingencies at sea. At one point in the 1980s, *taikongs* (trawler skippers) used to carry several thousand ringgit to deal with contingencies such as emergency repairs. But by the 1990s, most *taikongs* would only have a few hundred ringgit on board.

The relatively huge outlay to launch a new trawler did not escape the attention of maritime predators – both pirates and renegades. They realised that a far more lucrative trade would be to hijack boats for ransom instead of merely robbing the boats of cash, fuel, catch and equipment. The first hijacking incident occurred around

the early 1990s, when a boat was hijacked near Sumatra and RM150,000 demanded for the release of the trawler. The ransom was finally reduced to RM30,000 and the boat owner told to pay the amount into a certain bank account in Medan. Two weeks after paying the money, the boat returned to Hutan Melintang. All in all, the whole incident took three weeks from the hijacking to the return of the trawler. An important point to note is that the pirates of the 1990s were able to hijack trawlers and hold them for ransom because they had safe havens in which they could hide the boats.

Moreover, an indication that Malacca Strait piracy was becoming more organised was reflected in the way ransom was negotiated and payments collected. A Chinese middleman would invariably be involved. Ransom could be paid in a variety of ways. It could be paid in Medan or Belawan in Sumatra, or a mid-straits cash transfer could be arranged. Ransom could also be paid in Indonesia by the business partners of trawler owners to representatives of the kidnappers, or the money transferred directly into various Indonesian bank accounts. By the late 1990s, the 'standard' ransom for a new, well-equipped trawler was around RM100,000 or roughly 10 per cent of its cost.²²

An indication that GAM members were involved in piracy occurred in the late 1990s when a trawler was hijacked and two Hutan Melintang fishers seized. Boat and crew were taken to somewhere in Aceh province. Although a ransom was negotiated and paid, the trawler was found by the Indonesian military which placed it under surveillance. The two hostages and their boat could not therefore be released. Instead, they spent two weeks with their captors during which the kidnappers openly claimed that they were GAM members. The fishermen allege that one kidnapper showed them what appeared to be a genuine Malaysian identity card, and told them that he had worked extensively in Malaysia before deciding to return to Aceh to fight for its freedom. A second kidnapper told a similar tale, outlining details of his life in Kuala Lumpur before he decided to return to Aceh to fight for GAM. The two hostages escaped while the group was pursued by the Indonesian military. They were taken to the local military headquarters in Lhokseumawe, before being flown to Medan and thence to Kuala Lumpur.

A GAM MARITIME PROTECTION SYNDICATE?

The appearance of a maritime protection racket in 2000 indicated that GAM could be deeply involved in maritime predation. This racket was highlighted by a Malaysian Fisheries Department official in May 2004 when he told the press that pirates had been issuing monthly 'safe fishing certificates' to Malacca Strait fishermen for between RM300 to RM400 per vessel.²³ The Malaysian Fisheries Department's Protection of Resources branch chief, Abdullah Jaafar, claimed that these certificates were 'the work of three parties – the pirates, some corrupt Indonesian officials and the Free Aceh Movement (GAM).' He also alleged that the racketeers issued official-looking 'fishing certificates' in the name of the 'Aceh Sumatra National Liberation

Front.' He produced a copy of the fishing 'licence' or pass which bore the letterhead of the Aceh Sumatra National Liberation Front, signed by 'M.A./Abu Hendon.' Abdullah claimed that 80 per cent of trawlers had signed up for the protection racket since they had 'no confidence in the [Fisheries] department's enforcement unit.'²⁴ Commenting on the racket, Iskander Sazlan of the Maritime Institute of Malaysia stated that a 'mafia-like' network was most likely involved. Each boat had to pay roughly RM3,000 as the initial 'entry fee' to join the protection ring.²⁵ According to the head of the Hutan Melintang Fishermen's Association, he heard rumours that GAM and corrupt Indonesian officials could be behind it but there was no concrete evidence. This protection syndicate began winding down after the public exposure and ceased completely after the 2005 Indonesia-GAM peace agreement.

THE 21ST CENTURY AND THE AGE OF MARITIME KIDNAPPINGS

A different and more troubling development in maritime predations in the northern end of the strait began to emerge in the year 2000, and became especially marked after 11 September 2001. This was the trend to kidnap taikongs of the fishing vessels for ransom rather than hijacking the boat. This development resulted partly from increased maritime patrols in the Malacca Strait in the wake of 11 September 2001. More significant, however, was the renewed Indonesian military offensive against GAM beginning in May 2003. This included a tight maritime blockade which made it especially hard for pirates to hijack ships and escape with their prizes. For instance, in February 2004, an Indonesian navy ship intercepted and sank a tug purportedly hijacked by members of GAM, 14 nautical miles from Pulau Berhala, southeast of Medan.²⁶ In the third week of February 2004, an Indonesian navy ship sank a hijacked fishing boat off Tanjung Balai Asahan in northern Sumatra. A total of 11 fishermen survived and were rescued, and three alleged GAM members captured.²⁷ The pirates were apparently well-armed with rocket-propelled grenade launchers and assault guns. What the brief report did not say was that the pirates had earlier hijacked two Indonesian fishing boats and a Hutan Melintang trawler. They then placed all 11 fishermen including the four fishermen from Hutan Melintang, into one fishing boat which was later intercepted and sunk.

Another technological development that facilitated kidnap-for-ransom was the wide-spread use of mobile phones in the 1990s. This made negotiations between kidnappers and the families of their hostages direct and rapid. Kidnappings occurred so regularly that the Hutan Melintang community and the pirates had a 'standard operating procedure'. The pirates would invariably kidnap the *taikong*, who is the most valuable member of the crew and usually a member of the tightly-knit Hutan Melintang Chinese community; the Thai or Myanmarese crewmen are hardly ever kidnapped. The going rate for the release of the hostage again depends on the value of the boat he was taken from. As in the case of boat hijacking, the going rate for a ransom was understood to be around 10 per cent of the value of the trawler. Once a sum is agreed, the mode and date of paying the ransom is decided. If everything

goes smoothly, the hostages would be released within five days. Negotiations rarely drag beyond two weeks.

MARITIME TROJAN HORSES OF THE STRAITS

The heightened vigilance on the part of transiting ships in recent years also made it more difficult for maritime predators to attack large commercial craft. Many of these ships have high freeboards and often maintain anti-piracy watches in the strait. Again, the predators showed great adaptability by first taking over Malaysian trawlers to use as maritime 'trojan horses' to attack larger foreign vessels. The most celebrated of these cases was the attack on the Japanese-registered tug *Idaten* on 14 March 2005 when it was towing a laden barge off Penang. The pirates, armed with assault rifles and grenade launchers, used a Hutan Melintang trawler to board and kidnap the *Idaten's* Japanese captain, chief engineer and a Filipino crew member.²⁸ The fact that two Japanese were kidnapped aroused a great deal of media attention, and much play was made of the fact that a Malaysian fishing boat was involved in the piracy-kidnapping. The registration number of the boat PKFB1223 was noted, and four days after the attack, the Malaysian police detained the Malaysian taikong and his four Thai crewmen for possible complicity in the incident.²⁹ The crew were cleared and released by police by 19 March 2005.30

According to the fishing trader responsible for PKFB1223, the trawler left Hutan Melintang on 11 March 2005. The fishing boat was hijacked the day before the *Idaten* attack, and the crew robbed of their valuables and 2000 litres of fuel. However, the taikong was told by the pirate leader that the boat would be used to attack a more valuable prize. The next day, the *Idaten* was spotted and the pirate leader ordered the taikong to ram the tug three times altogether. Finally, after the pirates fired a few shots, the tug came to a stop. PKFB1223 and its crew were apparently released by the pirates on 15 March. But instead of sailing home to Hutan Melintang right away to report to the authorities, the taikong decided to continue with his fishing trip to cut his losses. The seriousness of the situation did not strike him because one of his Hutan Melintang colleagues had been involved in a similar event in December 2004. This was when another Hutan Melintang trawler was hijacked in the north of the Malacca Strait, and together with another fishing boat, was used by maritime predators to attack and kidnap the captain and chief engineer of the Singapore-registered tug Ena Sovereign on 15 December 2004. The taikong of the trawler involved in the Ena Sovereign attack apparently carried on fishing after the piracy incident without anyone creating a fuss.³¹ The Singapore owner of the Ena Sovereign was convinced after two weeks of 'hellish' ransom negotiations to free his two crew members that he was dealing with representatives of GAM.³²

Boundary Disputes, Renegades, Governance and the Chain of Corruption

While the fishers of Hutan Melintang suspected that GAM was behind all the piracy attacks, they had no doubt as to the identity of the second set of maritime predators. Indeed, Hutan Melintang community leaders allege that predations by renegades of the Indonesian maritime enforcement agencies cost them more than attacks by pirates. Why and how did these renegades get involved in maritime predations? Besides the issue of poor governance, an ongoing maritime dispute between Indonesia and Malaysia in the Malacca Strait has provided renegades with a ready excuse to seize Malaysian trawlers for ransom. The richest fishing ground for the Hutan Melintang fishers is located in the middle and northern approaches of the Malacca Strait, right smack in the zone of dispute.

The Malaysian-Indonesian maritime boundary in the Strait was demarcated by two agreements – the 1969 continental shelf agreement and the 1970 territorial sea boundary agreement.



Fig 1: The Indonesia-Malaysia Continental Shelf Boundary, 1969

The Malaysia-Indonesia continental shelf boundary runs much closer to the northern Sumatra coast than the Malaysian coast. Significantly, the Malaysia-Indonesia territorial sea boundary agreement covers only the southern end of the Malacca Strait, stopping at about 2° North.³³ Indonesia and Malaysia, up to the present moment, have not concluded a territorial sea agreement covering the northern end of the Malacca Strait, nor have they initialled any Exclusive Economic Zone (EEZ) agreement.

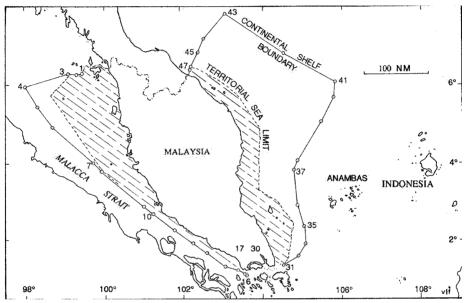


Fig 2: The Peta Baru Malaysia, 1979 source will be (V.Forbes)

However, Malaysia's position - embodied in the Peta Baru (New Map) published in 1979 - is that both the EEZ line and the continental shelf boundary line are identical, that is, the *Peta Baru* uses the concept of a single maritime boundary. Haller-Trost has expressed the view that Malaysia's position that the delimitation of extended maritime zones 'should be identical where the distance does not exceed 200nm' is entirely reasonable for the Malacca Strait and that a new single maritime boundary 'will probably eventuate'.³⁴ Nevertheless, Indonesia has been pressing since 1998 for a new maritime delimitation in the strait, since it feels that the 1969 continental shelf boundary agreement is not 'equitable' and has been quietly challenging Malaysian jurisdiction in the strait, especially over fishing rights in its northern end.³⁵ This is because Indonesia recognises only the continental shelf boundary, which gives Malaysia the right to exploit the resources of the seabed and subsoil, but not that of the water column. In contrast, a country's EEZ would endow the country 'with sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters super adjacent to the sea-bed and of the sea-bed and its subsoil', including of course fish.36

Thus the fishers of Hutan Melintang face a dilemma. On the one hand, they are assured by the Malaysian authorities that they are fishing in the Malaysian fishing zone which coincides with the Malaysian continental shelf area. On the other, they face constant harassment, both officially and unofficially, by Indonesian maritime enforcement agencies whenever they sail beyond Malaysian territorial waters because of the current Malaysia-Indonesia maritime dispute. This boundary dispute therefore gives rogue enforcement officials from Sumatra extra leverage to use against the fishermen.

According to the Hutan Melintang community, as long ago as the 1970s corrupt elements of Indonesian enforcement agencies would harass Malaysian fishermen in the strait and extort RM200 to RM300 each time. However, as the trawlers began to increasingly fish in the disputed maritime zone towards the northern end of the strait, the extortion changed in scope and scale. Renegade officials, after detaining a boat and crew, would demand that its owner settle the issue quietly, otherwise the boat would be officially detained for illegally fishing in Indonesian waters. In the early 1990s, before the widespread introduction of mobile phones and direct negotiation, a fishery trader became the de facto chief representative and negotiator for the fishers of Hutan Melintang. Sources close to him said that in the early 1990s, he travelled at least once every two months to Medan to obtain the release of yet-tobe officially detained fishing boats. He paid money into Indonesian bank accounts on at least two occasions, but for the most part, he negotiated the amount of 'ransom' and then arranged for the date and mode of 'ransom' to be handed over. In this sense, there was not much difference between renegades and pirates, even as to the amount of ransom - usually about 10 per cent of the cost of the boat held. How serious are the predations of the 'lost commands'? According to one community leader in Hutan Melintang, 'renegades' were responsible, until 2005, for about half of all maritime predations against them. However, their demands for payoffs for trawlers seized or arrested have gone up steeply since 2005. He attributed the increasingly unreasonable payments demanded by the rogue elements primarily to the ongoing maritime disputes between Malaysia and Indonesia, which escalated after the International Court of Justice awarded the islands of Pulau Sipadan and Ligitan in the Celebes Sea to Malaysia in December 2002.³⁷

What happens if the fishing trader or *taikong* cannot, or refuses to pay off the 'lost commands'? The personal experience of the chief negotiator himself is telling. In early 2002, two of his trawlers, one skippered by his own son, were seized by an Indonesian enforcement agency for illegally fishing in Indonesian waters off Sumatra. For various reasons he failed to pay the sum required to 'settle' the case in time. The result was that both his boats were officially detained in Belawan, and the eight crew members arrested. He spent the next 12 months commuting between Hutan Melintang and Medan, during which time he was involved in a complex process of payoffs ranging from court officials to prison warders. His son was sentenced to a 18-month jail sentence, which he negotiated to 10 months and finally 8 months. He claimed that he also had to pay extra to ensure that his son was properly fed in

prison, and that he was incarcerated in a cell equipped with an electric fan, sharing it with just three other prisoners. In any event, the fishing trader estimated that the detention of his boats and crew cost him nearly RM250,000. If he had settled the case unofficially at that time, he estimated he would have had to pay RM60.000.38

While these allegations regarding the judiciary in Sumatra might be hard to believe, it must be noted that that more than one criticism of the corruptible nature of the Indonesian judiciary has been made. To cite a 2004 article by *Indonesia* Corruption Watch:

... court mobsters is a systematical corruption. The court mobsters include all subjects in the court of law. In criminal court, corruption involving police, clerk, lawyer, prosecutor, and judge and also officers in the jail institutions. In the citizen and commercial court, the court mobsters also involve the lawyer, clerk and judge.³⁹

The essence of the article was that corruption among certain elements of the Indonesian judiciary had become systemic and entrenched, and while the post-Suharto decentralisation process had enabled court institutions to be more independent, 'corruption in court has also become independent and uncontrollable' at the same time.40

AND WHO WILL GUARD US FROM THE GUARDS?

The allegations by the Hutan Melintang fishermen that rogue elements of Indonesian enforcement agencies are also involved in maritime predation is given credence by a 2005 incident. On 25 July 2005, the Malaysian official news agency Bernama reported that a Royal Malaysian Navy (RMN) ship had rescued three Hutan Melintang fishing boats detained by Indonesian marine police in Malaysian waters.41 The report alleged that:

... shortly after the boats were detained about 33 nautical miles west of Kuala Selangor at 8.20 am, the chairman of the Hutan Melintang Fishermen's Association in Perak. Kee Keo Poh reported the incident to RMN's Armada Operations Centre (AOC) at RMN's base in Lumut. 42

The Malaysian navy vessel KD Kinabalu was despatched to the scene, and her commanding officer managed to convince the Indonesian Marine Police involved that the Malaysian trawlers had not encroached into Indonesian waters; the trawlers were then released. However, Indonesia subsequently claimed that the Malaysian boats had been fishing illegally in Indonesian waters, and pressed the Malaysian Government to return the Malaysian fishermen to Indonesia to 'face the law'.43 In reply, the Malaysian embassy in Jakarta questioned why the Indonesian Marine Police officers who boarded one of the Malaysian fishing boats were not in uniform, why these officers had 'taken goods belonging to the fishermen including handphones', and why they had used one Malaysian fishing boat to tow the Indonesian Marine Police vessel.44 Indonesia countered instead that KD Kinabalu's

commanding officer had obviously violated Indonesian sovereignty, and demanded that he 'be surrendered to them for further action'.⁴⁵ The then Malaysian navy chief replied that the RMN commanding officer had acted properly and legitimately, and moreover '... the Malaysian fishermen were within Malaysian waters, that is 38 nautical miles west of Kuala Selangor, and the Indonesian marine police had no right to detain them.'⁴⁶ This incident again illustrates how vulnerable Malaysian fishermen are in the Malacca Strait. Besides being preyed on by pirates, they are also pawns in the great maritime boundary game played between Malaysia and Indonesia.⁴⁷

One analyst has claimed that the Indonesian armed forces not only lacked the 'political motivation' to stop piracy, but there was the 'disturbing possibility that renegade navy and coast guard units are behind some of the attacks'.⁴⁸ Malaysia's official position, however, is that the Indonesian military is not involved in piracy. 'It is not, at least officially, a problem legitimised by the military's leaders', said Iskander Sazlan of the Maritime Institute of Malaysia.⁴⁹ He added that while Malaysian enforcement agencies have apprehended members of the Indonesian enforcement agencies for certain illegal activities in Malaysian waters, such incidents are regarded as individual breakdowns in the Indonesian chain of command. No official protests are therefore lodged for the sake of ensuring continued cooperation between the two countries, as well as not to undermine the credibility of the Indonesian enforcement agencies.

SUNSET OF MALACCA STRAIT PIRACY?

For the fishermen of Hutan Melintang, however, the biggest threat today comes from rogue elements of the Indonesian enforcement agencies. Several fishery traders and taikongs claimed that Indonesian enforcement officers are invariably aggressive and violent when they arrest the trawlermen for allegedly crossing into Indonesian waters.⁵⁰ More significantly, it has also disrupted 'market forces', with the price for the return of seized boats going up sharply since the end of 2005. From a 'standard' 10 per cent of the value of the boat, renegade officials now demand up to RM400,000 to 'settle' the return of a trawler, or roughly one-third to half the cost of a trawler. The owner of two boats seized in September 2005 paid RM400,000 for the release of a large trawler, and RM200,000 for a smaller boat. He had three options: pay the 'ransom', write off boats and crews completely, or pay the official fine with his crews serving jail terms. Even if he paid the official fine in court, his boats would be returned months later in a state of disrepair, and all removable gear would have disappeared. 'At least by paying the RM600,000 his boats and crew are back already, earning income to cover his losses', said the trader. According to him, the unofficial fines have skyrocketed because Indonesian enforcement agencies are under pressure from Jakarta to increasingly assert Indonesia's maritime sovereignty.

Very significantly, no Hutan Melintang boat has been attacked by 'pirates' since 2005. However, the predation rate remains unchanged, with 10 boats unofficially detained and 10 officially detained by Indonesian enforcement agencies in 2006. Up to 18 November 2007, eight trawlers were officially detained and more than 10 held and released unofficially by Indonesian enforcement agencies. Indonesian enforcement renegades have also adapted to the times since the 2005 GAM truce. Hutan Melintang community leaders claim that trawlers have not been unofficially detained for any significant length of time after 2005. The owner of the vessel would, instead, be informed by a Chinese middleman within 10 minutes of the seizure that his vessel had been detained and that a certain sum would be required for its release. In another new twist after 2005, seized trawlers are immediately released, together with the crew, once the owner agrees to the ransom. Again, the mode of payment varies - payment in cash in mid-strait, transfer to an Indonesian bank account, or payment to intermediaries in Medan or Belawan. Whatever the case, a Chinese middleman is invariably involved. Why do renegades release seized trawlers immediately? According to a Hutan Melintang trawler owner, it is to minimise exposure and detection by either Malaysian authorities or other Indonesian enforcement vessels. If detected, it means having to release the trawler, or sharing the spoils, or escorting the trawler to Belawan and forfeiting the chance of pocketing the unofficial ransom. It is all about 'cari makan' (Malay for 'making a living.') Ironically, it involves the economics of trust, since the renegades only have the word of the trawler owner to depend on. However, nearly all trawler owners pay as promised, since they fear increased harassment and unwarranted violence by the renegades in future if they fail to keep their promise. In the two cases of trawler owners failing to pay the promised ransom, they took the precaution of re-registering their boats, giving them new registration numbers and hopefully, a new identity. When a trawler is seized by Indonesian enforcement agencies in the disputed maritime zone, it is towed into Indonesian waters and the boat officially reported as having been detained well within Indonesian territorial waters. RMN officers unofficially confirmed this dissimilation, explaining that the Indonesians did so to ensure that charges against the Hutan Melintang fishermen for illegal intrusion would be watertight. Charging the fishermen for illegally fishing in what is still a disputed maritime zone could well be dismissed by Indonesian courts.

Conclusion: The Politics of Sustainable Piracy

As this paper has tried to illustrate, maritime predation with Malaysian fishermen as its primary victims has been endemic in the Malacca Strait for more than three decades. The majority of analysts also agree that the roots of the problem lie in Sumatra, and indeed that virtually all the maritime predators are either Indonesian, or based in Sumatra. It is obvious that the issue is both systemic and economic in nature. Both predators and prey know the rules of long-term survival. The fishers know the necessity of paying up, while the predators understand that unreasonable demands for ransoms would financially ruin the fishing industry on which they depend for a steady source of income. Maritime predation, as I have shown, fundamentally boils down to the problem of governance and widespread official corruption. It is highly telling that current Indonesian President Susilo Bambang Yudhoyono observed that official corruption is alive and well in Indonesia. Despite years of attempted reforms after the fall of Suharto:

...the ills of corruption, collusion and nepotism are still happening and with the handing over of financial autonomy to the regions, we can also feel the tendency for irregularities in the regions.⁵¹

Indeed, the Indonesian decentralisation process has led not only to more autonomy for agencies such as the military and the police, but also to a greater lack of accountability. 'Institutions in Indonesia have assumed such a degree of autonomy that no one can question what they are doing, much less interfere,' said a former senior official in the Suharto government. 'Currently, there is no mechanism in place to ensure transparency and accountability.' He explained that corruption would be almost impossible to stamp out because not only were Indonesian officials badly underpaid, but corruption had become deeply entrenched and systemic. With decentralisation and increasing lack of transparency, corruption had become worse. ⁵² In short, the 'interstitial seams between the 'sinews' of state power' have opened wider with decentralisation, giving maritime predations more opportunity to become more entrenched and flourish as an alternative source of economic power in Sumatra.

Thus, with corruption apparently well entrenched in the provinces including Sumatra, enhancing patrols in the Malacca Strait can control piracy - but only at an enormous cost. Maritime patrols are at best, defensive measures. Moreover, the issue of making multilateral patrols more effective by allowing hot pursuit across maritime boundaries is complicated by the existing maritime border disputes between Malaysia and Indonesia. My argument is that maritime predation is primarily a land-based problem that requires political will more than anything else, to resolve. The fact is that Indonesia can eradicate the piracy problem if it wants to, since it apparently has very good intelligence on genuine pirates. For instance, Indonesian police arrested a former GAM pirate leader in the north Java city of Cirebon in October 2007.54 Sumatran police also recovered four tugs hijacked in the Malacca Strait and arrested 16 of their hijackers in 2006 after tracing the tugs to the southern Philippines.⁵⁵ Similarly, in July 2006 the Indonesian Navy arrested three former GAM members involved in raiding UN-chartered ships carrying aid for tsunami survivors in north Sumatra. Significantly, these pirates were arrested not at sea but in Lhokseumawe City, Aceh, on 18 July 2006, two days after their latest raid against the relief ships.

The other major problem is that of controlling and disciplining the rogue elements of the Indonesian military and turning them from maritime predators into enforcers and upkeepers of law and order in the strait. This will not be easy given the problem of decentralisation and increasing autonomy for the outlying regencies and provinces. Thus, to eliminate maritime predation would require the reform, if not overhaul, of the Indonesian administrative and bureaucratic structure. Equally important, the people in Sumatra must be integrated within viable socioeconomic structures. Thus, while much publicity was given to the initiative by the four Malacca Strait littoral states – Indonesia, Malaysia, Singapore and Thailand – to launch the joint 'Eyes-in-the-Sky' air patrols in September 2005 to enhance strait security, what is required in addition would be an 'eyes on the ground' program to enhance good governance and transparency and emplace a viable economic system in Sumatra.

This paper has used a case study of the Hutan Melintang trawling community to provide insights into the problem of maritime predation in the Malacca Strait. As such, it has presented the point of view of only one particular segment of victims, and hence a somewhat one-sided picture. Yet this paper identifies the existence of a highly adaptive group of maritime predators that had targeted a specific group of strait-users for more than a generation. The longevity of this type of predation has been most likely facilitated by a combination of circumstances in Aceh province, including a breakdown in administration, widespread poverty, and a sense of grievance by the local population for being left out of mainstream development by Jakarta.

While many sources, including the IMB, have attributed the sharp decline in pirate attacks in the strait since 2005 to the 'landmark naval cooperation in July 2005' between Malaysia, Indonesia and Singapore, we have to ask ourselves whether this is the key or only variable.⁵⁶ This case study of predation against the Hutan Melintang fishing community seems to indicate that the cessation of piracy attacks is linked to the Indonesia-GAM peace agreement of 2005. Perhaps the end of the GAM insurrection meant that the Free Aceh Movement no longer needed to depend on piracy to help fund its insurgency. Or perhaps the Indonesian Government could afford to concentrate its intelligence and policing resources on cleaning up piracy and other criminal activities in Sumatra instead of fighting GAM rebels. Whatever the case, it would appear that the decline in piracy cases in the Malacca Strait cannot be attributed to increased patrols at sea alone. Evidence gathered during this study seems to suggest that GAM was behind most of the piracy attacks against Hutan Melintang fishers from the 1990s to 2005. As such, it should not be surprising that piracy attacks ceased after the 2005 truce. Can we then assume that the political solution reached between GAM and the Indonesian Government was one key reason why piracy attacks in the straits declined so sharply after 2005? Nevertheless, maritime predation by Indonesian renegades remains a serious problem for the Hutan Melintang community. Overall, my study seems to indicate that good governance, including political and economic stability, plays a key role in controlling piracy and other criminal activities in the Malacca Strait.

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Philippines-Australia Maritime Security Cooperation and the Status of Visiting Forces Agreement

Rommel C Banlaoi

Though the world's oceans cover two-thirds of the earth, efforts to secure the maritime domain continue to be derisory. The sea has always been an anarchic area that has been barely policed and protected until now.\(^1\) The seas have become the medium of various non-traditional security threats like piracy, sea robbery and various forms of smuggling that undermine national, regional and global security.\(^2\) The threat of global terrorism aggravates the growing anxiety of states relying on the security of the world's oceans, and maritime security becomes an arduous task for all stakeholders.

Australia and the Philippines are two sovereign maritime nations whose prosperity and survival depend heavily on the security of their maritime domains. As they share a common maritime strategic space, so their security interests are inextricably linked. Thus, they have a converging interest in promoting and enhancing maritime security cooperation, particularly in the aftermath of the 11 September 2001 terrorist attacks on the United States.

To strengthen this security cooperation, the Philippines and Australia signed the *Status of Visiting Forces Agreement* (SOVFA) on 31 May 2007, which is a significant milestone in the history of Philippine foreign and security relations, as it becomes its second most important security agreement after that with the United States. Australia, on the other hand, regards the SOVFA as a necessary step to intensify Australian security assistance to the Philippines to promote maritime security in Southeast Asia. Though this is not the first time that Australia has entered into a status of forces agreement, the SOVFA provides Australia with a strong legal justification to assist the Philippines in increasing its capacity for port security and border control, both of which aim to prevent terrorist attacks and deter transnational criminal acts in the critical sea lanes of Southeast Asia.

This paper examines maritime security cooperation between the Philippines and Australia with a particular emphasis on the SOVFA, taking stock of their strategic achievements and identifying some operational challenges in their relationship.

Early Maritime Security Cooperation

Though official diplomatic relations between the Philippines and Australia were only established in July 1946, conventional historiography states that both countries already had bilateral interactions as early as the 19th century, when Australian missionaries came to the Philippine islands to spread the Christian faith.⁴ There is no exact record to satisfactorily describe these early interactions, and while a book

attempted to take stock of the early contacts of the Philippines and Australia, there is still a need to conduct a more rigorous research to have an authoritative source of the early beginning of Philippines-Australia relations. Similar to other countries, it was in the maritime domain that the Philippines and Australia discovered each other. The known early contacts between the two countries is said to have occurred in 1606 when Torres reached Manila through a strait that presently bears his name.

Even before the granting of Philippine independence in 1946, the Philippines and Australia already had some form of maritime security cooperation. During World War II (WWII), the Royal Australian Navy (RAN) joined with Allied forces in the fight against the Imperial Japanese Army in the Philippines. More than 4000 Australian personnel fought alongside the Philippine armed forces to liberate the country from Japanese occupation. It is very sad to note, however, that in Philippine military history, the RAN involvement in the Philippines during WWII has not been given due scholarly attention.

When the Philippines received its political independence from the United States, Australia immediately opened a consular office in Manila, and assisted the economic reconstruction of the Philippines through the Colombo Plan (established in 1951). Also in 1951 the Philippines opened its Defence Attaché Office in Australia. Since then, the Philippines and Australia have conducted exchange visits by their security officials to discuss common issues and concerns during the Cold War.

The Philippines and Australia promoted security cooperation during the Cold War as members of the Southeast Asia Treaty Organization (SEATO), initially composed of the United States, the United Kingdom, France, Australia, the Philippines New Zealand, Pakistan, and Thailand, and focused on halting communist expansion in Southeast Asia. However, Philippines-Australia security cooperation at the height of the Cold War was largely a function of their military alliance with the United States, rather than closer bilateral security relations. With the disbanding of SEATO in 1977, Philippine-Australia defence relations became moribund as bilateral relations were increasingly shaped by diplomatic and economic imperatives.

The declaration of martial law in 1972 by Philippine president Ferdinand Marcos was a turning point in Philippines-Australian bilateral security relations. During this period, the Philippine Government opened its doors to other security partners in the Asia-Pacific region to enhance its strategic leverage with the United States, which was averse to Marcos' authoritarian regime. It was in the early phase of martial law when the Philippines began serious talks with Australia in the area of security, culminating in the Philippines entering into a defence cooperation program with Australia in 1973. Coincidentally, it was also during this difficult period when Australia looked for strategic options beyond the US alliance, particularly after the fall of South Vietnam in 1975, which resulted in the United States withdrawal of their land forces from Southeast Asia. This new security environment provided the Philippines and Australia with a proper strategic backdrop to re-examine their

regional security policies, and to explore the possibility of expanding their bilateral security relations beyond their military alliance with the United States.

The termination of the *Philippine-American Military Bases Agreement 1991* accelerated the strengthening of the Philippines-Australia security relations, as the withdrawal of American troops in the Philippines demonstrated the 'once-strong' and 'once-special' Philippine-American relationship was past its best.⁹ Since the American bases had long been regarded as the 'linchpin of a partnership built around a network of bilateral and multilateral arrangements between the Philippines and the United States', the security relationship between the two countries was said to have been left on uncertain ground.¹⁰

After 1991, the Philippine defence establishment deliberately sought the assistance of its Australian counterpart, which at that time was also looking for a reliable security partner in Southeast Asia after the end of the Cold War. Both countries conducted a series of intense bilateral security dialogues from 1992 to 1994, successfully resulting in the signing of the *Philippines-Australia Defence Cooperation Agreement* in 1995, which covered mutual access to defence facilities, joint training and military exercises, access to training facilities and courses, exchange of information, and cooperation in defence science and technology, and defence industry. Under this agreement, the Philippines and Australia have undertaken a number of defence-related activities, including Philippine participation in Training Activity LUMBAS (commenced in 2002), the first Philippines-Australia maritime surveillance Exercise (MARSURVEX), and the Australian-hosted multilateral Fleet Concentration Period Exercise KAKADU. There have been regular visits by defence and military officials, contributing to confidence building, and regular intelligence exchanges on various security issues of mutual interest.

Between 1991 and 2001, Australia was the major destination for Filipino military students undergoing education and training abroad, as the United States restricted the entry of Filipino military students to American military schools. The Philippines and Australia also worked together in Coalition operations in East Timor in 1999. Though 11 September 2001 resulted in the reinvigoration of Philippine-American security relations and resumed US military commitments to the Philippines, the Philippines and Australia sustained their security cooperation while supporting the United States in its global war against terrorism.

In March 2003, the Philippines and Australia signed an agreement to cooperate on combating terrorism in order to 'prevent, suppress and eliminate international terrorism in all its forms'. In July 2003, they signed an agreement on combating transnational crime, including maritime piracy, smuggling and their nexus with terrorism. The war on terrorism in Southeast Asia and maritime security became the rallying areas of Philippines-Australia security relations, which were further cemented by the signing of the SOVFA.

Maritime Security Cooperation in the Post-11 September 2001 Period

Since 11 September 2001, the Philippines-Australia maritime security relationship has grown significantly. Australian security is predominantly maritime in nature. Australia's counter-terrorism assistance of A\$10 million over the period 2003-08 has focused on strengthening the capability of the Philippine's military to bolster maritime border control and port security against terrorism. A Maritime Security Seminar was held in June 2005 to identify issues and concerns in their maritime security cooperation, resulting in the RAN conducting a maritime needs analysis for the Philippines during late 2005, giving Australia a clearer understanding of the type of maritime security assistance that should be provided to the Philippines.

Philippines-Australia maritime security cooperation post-11 September 2001 is focused on three major projects: the Philippines Port Security Capacity Building Project; the Army Watercraft Project; and the Coastwatch South Project.

PHILIPPINES PORT SECURITY CAPACITY BUILDING PROJECT

One of the flagship Australian activities is the Philippines Port Security Capacity Building Project, launched in 2004 with a total funding of A\$1.3 million and aiming to strengthen port security to reduce the risks of maritime terrorism. The project also assisted the Philippines to meet the July 2004 deadline for compliance with the *International Ship and Port Facility Security* (ISPS) *Code* introduced by the International Maritime Organization (IMO). The project was due to terminate in 2005, but was extended and should now conclude in mid-2008. Since 2004, the project has assisted some 100 Philippines ports with more than 2000 port security personnel to develop and implement port security plans.¹¹

ARMY WATERCRAFT PROJECT

The Army Watercraft Project aims to assist the Armed Forces of the Philippines to develop a small watercraft capability to better patrol the waters of Mindanao, which are used as a sanctuary by international terrorist groups. Various intelligence reports have shown that terrorists are using these waters as a means of transit, while this area is also a haven for local and international pirates, smugglers and sea robbers.

An Australian Army team visited the Philippines in August-September 2005, and confirmed that Armed Forces of the Philippines counter-terrorist operations in the south were constrained by a lack of suitable means to deploy troops into marsh areas. ¹² Australia committed to provide the Philippines with between 18-30 boats, along with training in small boat handling, surveillance and reconnaissance and maintenance of the vessels. ¹³

COASTWATCH SOUTH PROJECT

The largest maritime security project between the Philippines and Australia is the Coastwatch South Project, which aims to enhance the capability of Philippine maritime security forces to monitor the transit of people in the Celebes, Sulu and Sulawesi seas. Australia is helping the Philippines to develop its maritime surveillance and interdiction capabilities by centralising surveillance and response mechanisms to secure maritime borders in Mindanao. The project covers various corridors comprising Zamboanga Peninsula, Basilan, Sulu and Tawi-tawi; Davao Gulf and General Santos seaward going to the North Sulawesi Island in Indonesia; and the Southern part of Palawan and Balabac Island seaward going to Banggi Island and Sabah.¹⁴

Strategic Achievements

Because of its commitment to enhancing the maritime security capability of the Philippines, Australia participated in Exercise BALIKATAN 2006 as an observer. Exercise BALIKATAN is the largest joint military exercise between the Philippines and the United States.

The signing of SOVFA in 2007 was a culmination of the two countries' commitment to advancing their common maritime security interests. President Arroyo described Australia as one of the Philipines most important regional security partners. Cultural familiarity, shared liberal democratic values, geographic proximity and a common military alignment with the United States create a relationship of amity between the two countries. The SOVFA seeks to further operationalise their existing defence cooperation activities by providing more opportunities for security coordination particularly in joint/combined naval training/exercises.

Since 11 September 2001, Philippines-Australia security cooperation is inherently maritime in nature. The SOVFA affirms that their maritime security interests are so interlinked that maritime security problems cannot be reasonably analysed or resolved separately. The Australian Minister for Defence, Brendan Nelson, underscored this when he stated the agreement provides a more comprehensive legal framework to support Australian Defence Force and Philippines military personnel engaged in defence cooperation activities. ¹⁵ Based on a 'National Interests Analysis' undertaken by the Australian Parliament:

This treaty is of great significance to Australia, as it would allow our defence cooperation with the Philippines to deepen, particularly in the area of combined exercises. The Australia-Philippines Defence Cooperation relationship has been growing in the last few years, with the focus remaining on counter-terrorism, maritime security, and assistance to the Philippines Defence Reform program. The main components of our counter-terrorism cooperation include an annual bilateral counter-terrorism training activity called Dawn Caracha, the Army Watercraft Project, and maritime security assistance. ¹⁶

Under the SOVFA, Australian forces can now conduct combined naval military exercises with their Philippine counterparts to enhance interoperability in managing common threats. Though the Philippines and Australia have previously conducted naval military activities and exercises, the SOVFA regularises their bilateral naval exercises, while enhancing other bilateral activities to assist in managing common maritime security concerns.

Australia has a strong interest in maritime security cooperation with the Philippines because of its strategic interest in the security of Southeast Asian shipping lanes. ¹⁷ As almost 40 per cent of Australian seaborne trade passes through the pirate-prone waters of Indonesia and the southern Philippines, Australia has a strategic interest in promoting regional security by building the maritime capacities of littoral states. Australia has assisted Philippine maritime forces to build and enhance their capability to secure their waters, protect freedom of navigation and counter threats to maritime security, particularly those emanating from international terrorist groups.

The Philippines Government strongly welcomes Australian assistance to improve its ill-equipped maritime forces. Though the Philippines is the world's second largest archipelago, it has one of the weakest maritime forces in Asia. The United States military withdrawal in 1991 aggravated the already poor state of Philippine maritime forces. A force modernisation program began in 1995, but the 1997 Asian financial crisis prevented its implementation, prompting a naval officer to lament that the Philippine Navy 'lags both in quality and quantity among the other navies in the region'. Philippine national security adviser Norberto Gonzales also admitted that the country's maritime forces had very limited capability to protect its waters when he said:

We cannot watch and check every boat that travels between Indonesia and Mindanao. Over 26,000 trips are made by these boats and it is impossible to monitor each of them given the government's meagre resources.¹⁹

The main strategic intention of the Philippines Government in signing the SOVFA was to get more military assistance from a country that it regards as the most important and reliable strategic partner after the United States. Thus, immediately after the SOVFA signing, the Australian Government announced the donation of 28 airboats to the Philippine military worth US\$4 million to enhance its capability to fight terrorism and promote its maritime security.

Shared Strategic Perspectives

As maritime nations, the Philippines and Australia share many strategic perspectives on maritime security issues. Their concerns converge around the following strategic issues, which facilitate their cooperation and enhance their engagement: alliance with the United States; the challenge of a growing China; possible maritime terrorist threats in Southeast Asia; disputes in the South China Sea; the China-Taiwan issue;

and non-traditional security threats. The SOVFA is a logical product of their innate interests to promote maritime security.

ALLIANCE WITH THE UNITED STATES

One security convergence between the Philippines and Australia is their strong security alliance with the United States, and both welcome a continued US strategic commitment to the Asia-Pacific region.

For the Philippines, its security relationship with the United States is the linchpin of its defence and security policies.²⁰ Though the Philippines views its cooperation with Southeast Asian neighbours as the cornerstone of its regional policy,²¹ its US alliance continues to shape the direction of its foreign and security policies, particularly in the global campaign against terrorism. Thus, when the United States suggested the creation of a Regional Maritime Security Initiative, the Philippines Government support it. However, pressure from Malaysia and Indonesia prevented its creation.

Australia regards the United States as the keystone of its defence policy and is therefore essential for advancing its national interests and is fundamental to its security and prosperity.²² In *A Defence Update 2003*, Australia stated 'Australia and the United States continue to share many values and interests, and we jointly benefit from, and contribute towards, global stability and prosperity'.²³

THE CHALLENGE OF CHINA

The Philippines and Australia also share common concerns on the challenges posed by the rapid rise of China, which is emerging as an Asian maritime power. Although both countries have very good diplomatic and trade relations with China, they are wary of China's burgeoning economic power because of its spill over effects on China's expanding military power.²⁴ In 2007, China's defence budget reached US\$44.94 billion, representing an increase of 17.8 per cent compared to the previous year, which was a doubling of its 2000 defence budget.²⁵ If this growth in defence expenditure continues, China's defence spending could reach US\$185 billion in 2025.²⁶ According to *A Defence Update 2007*, while China's economic growth has benefited the world, its rapid military expansion could cause instability in the Asia-Pacific region.²⁷ The Philippines Government shares this perspective.²⁸

THE THREAT OF MARITIME TERRORISM

The Philippines and Australia have common strategic interests in combating maritime terrorism in Southeast Asia. Although there have been few maritime terrorist attacks, there is an increasing concern that shipping and ports may face a terrorist attack.²⁹ Because of the terrorist threat posed by Jemaah Islamiyah (with its ambitious desire to establish a pan-Islamic state in Southeast Asia) and the high

incidence of piracy in the waters of Southeast Asia, maritime terrorism has become a serious challenge to regional maritime security.³⁰

The threat of maritime terrorism caused panic in Southeast Asia when Aegis Defense Services reported that the robbery of the Indonesian chemical tanker *Dewi Madrim* off the coast of Sumatra on 26 March 2003 appeared to be the handiwork of terrorists learning how to drive a ship in preparation for a future attacks at sea. What interested analysts about the incident was the observation that the *Dewi Madrim* case failed to conform to the established patterns or customary practices of piracy attacks. The perpetrators were fully armed with automatic weapons that attacked the ship through the bridge rather than the safe room and instead of ransacking the crew's goods, they steered a laden tanker for almost one hour. 32

Another important case that raised apprehensions was the bombing of *Superferry 14* on 27 February 2004 after it left Manila Bay. The incident resulted in the death of 116 passengers and the wounding of around 300 others. Because of the damage caused by the explosion, it was described as the most violent man-made disaster in Philippine waters since 2001 and the worst terrorist attack in Asia since the 2002 Bali bombing. Though the Abu Sayyaf Group claimed responsibility for the explosion, it was actually carried out by Redento Cain Dellosa, a Muslim convert associated with the Rajah Solaiman Islamic Movement.³³

The Philippines and Australia share common anxieties on the threat posed by maritime terrorism in Southeast Asia, considering their heavy reliance on seaborne trade. Almost all (99.9 per cent) of Australian trade by weight is transported by sea. As an archipelago of 1707 islands with one of the world's longest coastlines, the Philippines also relies heavily on maritime trade. There are also an estimated 375,000 fishing vessels and around 15,000 other vessels and oil tankers operating in Philippine waters. The Philippines is also the first choice for seafarers among international shipping lines. Thus, securing the waters of Southeast Asia against possible terrorist attack is the common task of the Philippines and Australia.

A particular concern of both countries is that Jemaah Islamiyah is known to use two maritime routes to move from northern Indonesia to the southern Philippines. The first route is from Manago to Davao and the second is from the northernmost part of Kalimantan to Davao using Sandakan of Malaysia as a stop over. It is therefore important for Australia to help the Philippines to enhance its maritime security capability to better protect its southern borders.

DISPUTES IN THE SOUTH CHINA SEA

The South China Sea or what some Filipinos call the 'Western Philippine Seas'³⁴ lies in the northern extent of the indo-west pacific seas. The disputed islands are collectively known as the Spratlys; comprise no less than 190 islets, reefs and rocks with an approximate area of 390,000 km², and are surrounded by rich fishing grounds and potentially gas and oil deposits. The Spratly Islands are claimed in their entirety by China, Taiwan, and Vietnam, while portions are claimed by Malaysia and

the Philippines. There are fears that disputes in the South China Sea, if not properly managed, may impact on the freedom of navigation of shipping in the area, which may impact on regional economies and, in turn, trigger external power rivalry in the Asia-Pacific region. External powers have high stakes in the South China Sea as their major trade routes pass through the area.³⁵

It has been a long-standing position of the Philippines and Australia to develop a regional code of conduct for the South China Sea to peacefully manage territorial disputes. As a claimant state, the Philippines considers the South China Sea as an integral aspect of its territorial defence. Australia, though not a claimant state, is a major stakeholder as it relies on continued freedom of navigation in the area. An embedded interest of Australia in strengthening its maritime security cooperation with the Philippines is to provide opportunities to discuss the South China Sea and make the Australian Defence Force more effective in its regional engagement. The SOVFA enables the Philippines and Australia to conduct maritime exercises in the Philippine-controlled portions of the South China Sea.

CHINA AND TAIWAN

The Philippines and Australia uphold a one-China policy, which recognises Taiwan as a province of China. Mindful of the complexities of the issue, both the Philippines and Australia want the status quo to prevail and urge both China and Taiwan to avoid provocative or unilateral actions that might escalate tensions in the straits, as a security crisis in the Taiwan Strait could spill over to the rest of the Asia-Pacific region. Thus, a peaceful resolution of the Taiwan issue is sought by all nations depending on freedom of navigation along the sea routes connected with the strait. At the ASEAN Regional Forum in 2007, Australia categorically stated that 'pending a peaceful resolution of differences, the status quo shall be maintained and both sides encouraged to avoid provocative or unilateral steps that might be misunderstood or lead to increased tensions.' Intelligence analysis, strategic scanning and net assessment in the Philippines shares a common view that the status quo should prevail in the cross strait in the short and medium terms.

NON-TRADITIONAL SECURITY

Like other states in the Asia-Pacific region, the Philippines and Australia are also concerned with non-traditional security threats, such as piracy and armed robbery against ships, people smuggling and human trafficking, small arms trafficking and drugs trafficking. James Warren of the Asia Research Institute at the National University of Singapore claims that piracy in Southeast Asia costs the world economy US\$25 billion a year.³⁸ Alan Chan, a vocal anti-piracy advocate and an owner of Petroships in Singapore, states that piracy is costing the region around US\$500 million a year.³⁹ The Organization for Economic Cooperation and Development says that new maritime security measures to counter the threat of attacks will require an initial investment by ship operators of at least US\$1.3 billion, and will

increase annual operating costs by US\$730 million thereafter.⁴⁰ The cost of piracy in Southeast Asia is projected to increase in the future. The July 2003 Philippines-Australia agreement to combat transnational crimes and the SOVFA are intended to enhance cooperation on non-traditional security threats, particularly piracy and maritime terrorism.

Operational Challenges

While there have been strategic achievements in Philippines-Australia maritime security cooperation, there are some operational challenges that both nations have to surmount to the implement the SOVFA: the non-ratification of the SOVFA by the Philippine Senate; Philippines apprehension over the presence of Australian troops conducting military exercises in Philippine territories; jurisdictional issues; resistance to the agreement by opposition groups who are concerned that Australia may have an ulterior motive; and the issue of interoperability given the wide disparity in capabilities between the countries.

The Australian Parliament's Treaties Committee has recommended that Australia ratify the SOVFA, but it still needs to be ratified by the Philippine Senate so that it can be operationally implemented. The Philippine Senate opted not to act decisively on the SOVFA so as to not to inflame the controversy brought about by a rape case against American soldier who participated in a Philippines-American joint military exercise. Furthermore, the Philippine Senate thought that discussing the SOVFA amidst this crisis in the implementation of Philippine-American Visiting Forces Agreement was unpopular. Thus, the Philippine Senate is bidding its time in deliberating the SOVFA.

After the signing of SOVFA, the two navies held a small joint maritime training in October 2007 dubbed 'PN-RAN Exercise LUMBAS 2007'. Held in the Island of Cebu, it was conceptualised as the first Staff Exercise and Command Post Exercise between the two countries' naval forces. It aimed to enhance interoperability and operational readiness of the naval forces particularly in humanitarian assistance and disaster relief operations, and maritime security operations from the tri-border areas of the Philippines, Malaysia and Indonesia.⁴¹ The first LUMBAS activity was held in 2002 and since then has been held annually.

There is a strong apprehension in the Philippines about the presence of Australian troops conducting military exercises in Philippine territory. Cause-oriented organisations fear the eventual establishment of an Australian military base in the Philippines, which is unconstitutional. Moreover, the Philippine Constitution prohibits foreign troops from engaging in combat operations in the country. But the Philippine military has stressed that there will be no establishment of a permanent Australian base in the Philippines, and the SOFVA only provides temporary structures for troop billeting, classroom instruction, support and messing to be used Philippines and Australian forces during the naval exercises. It is also feared that the SOVFA is just a cover to allow Australian troops to engage in combat operations in the Philippines. Opposition leaders in the Philippines regarded the SOVFA as a

dangerous ploy to justify the presence of Australian troops in the Philippines.⁴² In October 2005, the *The Australian* newspaper cited an unnamed former Australian Security Intelligence Service officer, who claimed that Australian Special Forces have been involved in covert operations in Mindanao for almost a year. But the Australian and Philippine governments denied the reports. The Office of the Deputy Chief of Staff for Operations of the Armed Forces of the Philippines even assured that under the SOVFA, military operations would be done solely by Philippine troops. Australia's support will be limited to capability and capacity development and Australian troops will not be directly involved in the conduct of any military combat operation.

There is the jurisdictional issue of how to manage possible violations of Philippines law by Australian troops. This is a very sensitive issue in the Philippines considering its experiences with American troops. But the Philippines Department of Justice explains that under the SOVFA, detention and litigation of Australian troops accused of violating Philippine law shall be within the jurisdiction of the Philippines judicial system.

There is an allegation that the ulterior motive of Australia in deepening maritime security cooperation with the Philippines through the SOVFA is not to protect the waters of Mindanao from terrorist incursion but to advance Australian economic interests in the mining industry.⁴³ Studies show that the Philippines is one of the most mineralised countries in the world, ranking third in gold, fourth in copper, fifth in nickel and sixth in chromite. Its untapped mineral resources have an estimated value of at least US\$840 billion. Australia has invested in several mining projects in the Philippines through the Lafayette, Indophil, Climax-Arimco, QNI/BHP Billiton Mineral, Red 5 and other companies. 44 According to the Peoples Network for the Environment (PNE), a Philippine environmental organisation, 'more Australian mining firms are now flocking south to Mindanao following strong opposition from the local communities to mining projects in Northern Philippines and Luzon'.45 Clemente Bautista, Kalikasan PNE national coordinator said 'Australian troops and giant mining companies are not welcome in the Philippines.'46 There is also a sinister analysis that Australia has trade, mining, and other economic interests in the Philippines, making it a favourable site for deployment and operations of Australian troops.⁴⁷ But the Philippines Government finds all these views preposterous.

Finally, Philippines-Australia maritime security cooperation is a classic example of cooperation between 'the haves and the haves not', between big and small, and between rich and poor powers. Thus, there is a great difficulty in achieving interoperability in an 'unequal' situation. In fact, interoperability between the countries' naval forces is very limited.

Conclusion

The Philippines and Australia have undertaken security cooperation over many years and the signing of SOVFA in May 2007 is a logical result of this long-standing cooperation. After 11 September 2001, their security cooperation has focused largely on maritime security, with Australia deeply involved in increasing the capacity of the Philippine maritime forces to secure its maritime borders against various threats, particularly those emanating from international terrorist groups operating in Southeast Asian waters.

Because of its commitment to enhance the maritime security capability of the Philippines, Australia has become the second most important strategic partner of the Philippines, next to the United States. But there are operational challenges that both countries have to surmount if they want to sustain and enhance their maritime security cooperation in the years to come.

PART 5 ~

Indian Ocean

Maritime Security Challenges in the Arabian Sea

Muhammad Afzal Tahir

The sea has always been a major reservoir of resources and offers extensive opportunities to promote national interests. It also poses challenges in the form of threats that imperil national security. Maritime security, therefore, is related to security issues pertaining to the sea, which could include political, economic, military, scientific or technological aspects with sea trade being the most critical factor for the global community. The vulnerability of a nation's sea trade was aptly highlighted by Rear Admiral Sir William Creswell who said 'Australia's vulnerable point is her trade, practically all water borne. Australian trade flows in arteries exposed to view - outside her skin. If the flow is blocked, Australian business will be paralyzed'.¹

Traditionally, the majority of threats to maritime security emanate from inter-state territorial disputes, political instabilities, transnational crimes such as maritime terrorism, piracy, human smuggling, drugs and small arms trafficking, and environmental degradation.

In the new millennium, however, the concept of maritime security has been redefined to include newer dimensions. Interdependency has increased due to the cumulative impact of globalisation, depleting energy resources and the asymmetric dimension of security concerns. In the economic context, seaborne trade and seabased energy resources have gained greater significance in recent decades. States are exploring new sources to meet their energy requirements. Post-11 September 2001, events have brought a paradigm shift in the global security calculus and reshaped the 21st century's threat canvas. Unlike the past, states are confronted with the threat of transnational terrorism emanating from non-state actors, which have no defined boundaries or dimensions. The extension of these new security challenges have reshaped the maritime environment and forced navies to restrategise their force structures and roles.

In the global maritime context, the new asymmetric threats demand more than mere military undertakings to counter them, a scenario grossly different than the traditional military scene, which had clearly defined adversaries and theatres of action. In today's environment more emphasis is on policing and constabulary roles to counter non-military, transnational and asymmetric threats. Maritime forces are, by design, ideally suited to operate in an asymmetric environment due to their inherent flexibility, reach, sustainability and the ability to create synergetic effects in multinational configurations.

In the regional maritime context, the Indian Ocean is home to some of the world's most important sea lines of communication. About half of the world's trade

by value and one third of its oil consumption passes through this ocean. A total of 17 million barrels of crude oil passes through the Strait of Hormuz each day.² Consequently, maritime security and stability of the north Arabian Sea is critical to freedom of navigation and the uninterrupted flow of trade. Thus, energy security in the region has emerged as a vital interest particularly for the world's leading economies, both regional and extra-regional.

After having talked about the global and regional maritime context, it is important to describe some of the most significant challenges to regional maritime security in the Arabian Sea.

The first is maritime terrorism, but we do have problems coming up with a definition to describe it. A Council for Security Cooperation in the Asia-Pacific working group defined maritime terrorism as 'the undertaking of terrorist attacks and activities within maritime environment, against maritime assets and infrastructure'. Fortunately the world's oceans so far have not been a major focus of terrorist activities. According to the RAND terrorism database, seaborne strikes have constituted only 2 per cent of all international incidents over the last 30 years. 4

Nevertheless, the maritime realm is, by design, conducive to these types of threat contingencies. Given their vastness and largely unregulated area covering more than 209 million km² of the earth's surface, the planet's oceans lie beyond the strict jurisdiction of any one state, meaning that they are by definition anarchic. A complex network of territorial waters, estuaries and riverine systems, which in most cases is poorly managed and monitored, links these oceans.

In recent decades, the phenomenon of maritime terrorism has drawn global concerns. From the 1961 hijacking of the Portuguese flagged cruise ship *Santa Maria* to the bombing of the Philippine *SuperFerry 14*, as many as 13 high profile maritime terrorist incidents have occurred over the period 1961-2004.⁵

There is also the danger of terrorists using relatively unguarded and vulnerable sea routes to undertake acts of maritime terrorism. The attacks on the USS *Cole* in 2000 and the French tanker MV *Limburg* in 2002 off Yemen, and the suicide attack against Iraqi oil platforms in April 2004 are clear manifestations of this threat.

Many of these incidents may seem to be low scale and isolated; however, a probe reveals significant economic as well as political effects caused by these terrorist acts. A pertinent case in point is the suicide attack against the *Limburg*. Although the incident resulted in only three deaths (two of which were the bombers), it directly contributed to a short-term collapse of international shipping business in the Gulf of Aden and nearby waters, led to a \$0.48/barrel hike in the price of Brent crude oil and, as a result of the tripling of war-risk premiums levied on ships calling at Aden, caused the Yemeni economy to lose an estimated \$3.8 million a month in port revenues.⁶

In the wake of 11 September 2001, there are fears that terrorists inspired by Al Qaeda could use the regional waters of the Arabian Sea to transport personnel, weapons and finance.

From this discussion it can be safely concluded that the threat of terrorism at sea is a reality of 21st century, however its distinction from traditional maritime crimes has to be recognised.

I share the perception that maritime terrorism by its nature is different from the traditional maritime crimes such as piracy, which has also become the bane of the modern seafarer despite the extensive technological advancements made by the shipping and security agencies. The numerous cases of reported and unreported piracy have led to considerable concerns and multinational efforts to control this violent crime. In recent years, the Malacca Strait, South China Sea and the Somalian coast have emerged as areas most affected by piracy incidents. It may be pertinent to highlight that a total of 31 reported incidents of piracy have occurred off the Somali coast.⁷

An important adjunct to maritime terrorism is drugs and arms trafficking. With huge profit margins, drug trafficking is by far the most lucrative means of making quick money, which is used to finance terror networks and arms trafficking. The sea also provides a safe medium for transferring arms and ammunition worldwide. There has been unabated and record production of drugs and narcotics in Afghanistan in recent years, which makes it imperative for the international community to stop its trafficking to the outside world. Guarding the Makran coast, which also serves as one of the outlets for Afghan drug trade, thus becomes vital to achieve this objective.

Another dimension to maritime crime is the smuggling of commodities such as oil and consumer goods, and human trafficking, which has grown phenomenally in recent years. The human trafficking has led to ingress of illegal immigrants in some of the regional countries, which has been a cause of increased social upheaval and crime.

Finally a non-military challenge to regional maritime security is marine pollution and environmental disaster. Oil-related disasters at sea are the major concern, not only for environmentalists but mariners as well. The oil spillage incidents, which occurred in Pakistan in 2003 and on the southeast coast of Mauritius in February 2005, are relevant cases which caused considerable damage to the maritime environment. Maritime disasters create havoc with marine life and have long lasting effects, and have the potential to affect maritime security. Regional governments are deeply concerned with major oil spills or wrecks of oil tankers at narrow approaches to harbours and choke points, since such spills or wrecks can seriously affect the flow of merchant shipping traffic.

This evaluation indicates the complex nature of challenges to the regional maritime security in the Arabian Sea. We are now confronted with newer dimensions of maritime crimes, which are transnational in nature and thus entail a multinational response. It has become virtually impossible for any nation to ensure single-handedly its maritime security. We therefore, need to evolve over time to anticipate threats, develop strategies to respond and build the cooperation and trust both at the regional and international levels to deal with this menace.

Although, the recent years have seen some realisation of the importance of these issues, the concept of maritime security cooperation has not attained the desired level of maturity in the Arabian Sea region. This is because the littoral states are sensitive to issues of outside interference and national sovereignty. Such cooperation can only be developed through the process of mutual respect and confidence building.

In the Arabian Sea region, the threat of intra-state as well as inter-state conflict remains a grim reality. The region is subject to a variety of security threats that are short of state-on-state conflict, yet present an equal if not greater threat to peace and stability. It has extreme economic diversity, where some of the fastest growing economies live in close proximity with some of the poorest countries of the world. The maritime security related problems that confront the region are not 'small' by any standards. However, if the problems of holistic security are enormous, so are the opportunities to resolve them.

In addressing the question of how these opportunities may best be maximised, the most appropriate mechanism is 'constructive engagement' to counter the individual and collective challenges that we face. Constructive engagement by regional and extra-regional navies enables sharing of operational and doctrinal expertise, interoperability and enhanced maritime domain awareness. Coupled with this, progressive capacity building of the littoral states could transform their security-related fragility into self-sufficiency.

I may mention here that despite regional inhibitions there have been considerable efforts to pursue collaborative maritime security in the Arabian Sea. The continuous presence of the US-led multinational Task Force for maritime security operations in Arabian Sea is a manifestation of this. Regional navies continue to enhance bilateral collaboration through regular exercises and other maritime interactions. The Pakistan Navy continues developing and enhancing regional maritime collaboration through the regular conduct of bilateral and multilateral exercises in the Arabian Sea. In January 2008, as many as seven Royal Saudi Navy ships are engaged in bilateral exercises with the Pakistan Navy off our coast. We feel that such interactions not only encourage confidence and enhance maritime cooperation but also contribute towards regional maritime security and stability, an objective the Pakistan Navy is actively pursuing. However, I must acknowledge that considering the complex security dynamics of the Arabian Sea region, greater efforts are needed by the littoral states to achieve common goals.

I would like to briefly discuss the Pakistan Navy's contributions to regional maritime security through its participation in the Coalition Maritime Campaign Plan (CMCP), which is the maritime component of Operation ENDURING FREEDOM. It should be recognised that the Pakistan Navy is the only regional navy to form part of the CMCP and, despite its resource constraints, has contributed significantly towards maintaining regional maritime security. Twenty one Pakistan Navy ships have participated in it since April 2004, and the Pakistan Navy also took over the command of multinational Task Force 150 from April to August 2006 – the first

non-NATO navy to achieve this distinction. In recognition of its professional ability and increased mutual confidence amongst coalition partners, the Pakistan Navy has again assumed command of Task Force 150 from August 2007 to February 2008. Command of Task Force-150 has encouraged collaborative maritime security in North Arabian Sea.

The Pakistan Navy's participation in the CMCP has also made it possible to effectively monitor and control smuggling of arms and drugs in the north Arabian Sea. In this regard, our warships in conjunction with Coalition forces have successfully apprehended various suspected vessels involved in drugs and arms trafficking. So far 15 such vessels have been seized by Pakistan Navy ships, deterring terrorism in the region.

The Pakistan Navy has been proactive in encouraging 'collaborative maritime security' between regional and extra-regional navies. In this pursuit, we have organised and hosted the multinational Exercise AMAN in March 2007, in which 28 countries participated with 14 ships, special operation forces and a number of observers. The major participants included the navies of the United States, China, the United Kingdom, France, Turkey, Italy, Bangladesh and Malaysia. Importantly, this exercise enabled the People's Liberation Army Navy to partake in a multinational exercise. Their participation reflects China's keenness to interact with regional and extra-regional navies.

Exercise AMAN 2007 demonstrates Pakistan as a responsible country contributing towards peace and stability in the region and a proponent of 'collaborative maritime security'. The success of Exercise AMAN 2007 and benefits accrued, has led to it becoming a biennial event. The next exercise is scheduled for March 2009, wherein we would appreciate participation of regional and extraregional navies to promote interoperability.

An analysis of the preceding discussion reveals that the way ahead to address the various challenges to regional maritime security is to create a collaborative maritime security apparatus. However, a pre-requisite to make any pragmatic headway in this regard will be to resolve contentious issues and disagreements between the regional states through dialogue and political process. Such an approach could facilitate confidence building and trust between the regional countries, leading to further cooperation in combating maritime crime and enhanced maritime domain awareness.

Finally to conclude I would say that the wide ranging economic and security challenges in the Arabian Sea can only be managed through the implementation of an effective regional maritime security regime, which can only be realised through political consensus and commonality of interests and objectives. Traditionally, navies can play an effective role to help achieve this objective as to quote from an old saying 'sea unites while the land divides'.

An Indian Maritime Security Perspective

Anup Singh

Let me first paint before you, a picture of the Indian Ocean. It comprises many bodies of water, and the Arabian Sea is but one of the several seas, bays and waterways of this ocean. It is within the entirety of the Indian Ocean, and its environs that I intend to present the Indian maritime security perspective.

I would like first to look at the rich maritime history and heritage of this ocean. Ancient India enjoyed active trade links with all shores of this ocean including Arabia, Mesopotamia, the Levant, the Mediterranean, Southeast Asia and China. And since we are talking of maritime security and since I have taken India as an example, let me allude to the very significant linkage between maritime security and a nation's sovereignty. From antiquity, up to the end of the 12th century, several Indian kingdoms - especially those in the peninsula - possessed significant seagoing navies.

It was only when the Indian ruling elites forgot the imperatives of maritime security that India's dominance of world trade was lost. The realisation that this gross neglect of maritime security eventually led to the colonisation of the sub-continent and the consequent loss of India's very independence for well-nigh three centuries is obvious. This harsh lesson of history is not lost upon the modern, independent Indian nation and hence the growth of its navy as the guarantor of India's maritime interests. And yet, we must remain acutely conscious of the fact that no nation is an island unto itself, be it sub-continental India or continental Australia.

In fact, I am certain that I speak for all of us in saying that today we find ourselves in the midst of an unprecedented globalisation of trade, technology, media, and other areas of human activity. We are acutely aware that this interdependence is the defining characteristic of the modern world. In the wake of this interdependence has come the realisation that there is a pressing need to assure security in all its myriad forms, particularly economic security and security of international trade and commerce. As a corollary to this interdependence, we readily acknowledge that it is possible for different players to view the Indian Ocean region differently, because, on issues of international security, ' ... where one stands depends upon where one sits'.

As far as India's location in the Indian Ocean is concerned, India 'sits' at the natural junction of the busy international shipping lanes that criss-cross this ocean and it is this that determines much of our security viewpoint. In terms of shipping density, the seas around India are one of the busiest in the world, with over 100,000 ships transiting the shipping lanes every year and the Malacca Strait, alone, accounting for some 60,000 ships annually.

Unlike the other two oceans, a critically important aspect of the Indian Ocean is that the orientation of the international shipping lanes that criss-cross it, are shaped by a finite number of gateways or 'choke-points'. These are the:

- Suez Canal
- Strait of Bab-el-Mandeb
- Strait of Hormuz
- around the Cape of Good Hope and through the Mozambique Channel, as also between Madagascar and Mauritius
- Malacca Strait
- Sunda Strait
- Lombok Strait.

There is no gainsaying the fact that of all the cargo that moves along the international shipping lanes of the Indian Ocean, the most critical, is oil and refined-oil products. Almost 1000 million tonnes of oil from West Asia passes close to Indian shores annually. Some part of this is destined for our own ports, to feed the increasing demand for energy to fuel our current economic growth. A much greater proportion, however, is destined for the oil-intensive economies of America, Europe, China and Japan. This is where the Indian Navy and the Indian Coast Guard act as major stabilising forces for this great movement of energy across the Indian Ocean, not just for us, but for the world at large.

In discharging this 'stabilising' function, it is clear to us that our geo-strategic environment is sharply 'impacted-upon' and perhaps even 'moulded by' the interplay of the geo-strategic moves of other players - both regional and extra-regional, both state and non-state, and, both benevolent and malevolent - with those of India. In the Indian Ocean region, the threat of 'intra-state' as well as 'inter-state' conflict remains a grim reality. The region is also subject to a variety of security threats that are short of state-on-state conflict, yet present an equal if not greater threat to peace and stability. The region is marked by extreme economic diversity, where some of the fastest-growing economies live cheek-by-jowl with some of the poorest countries of the world.

The problems that confront all of us are not 'small' by any standards. The following ills adversely impact most parts of the world in varying measures but are most conspicuous in the Indian Ocean: terrorism, piracy, illegal ingress of arms, drug smuggling, and human trafficking.

As if these were not enough for the Indian Ocean, the region is the locus of almost 70 per cent of the world's natural disasters. With this as the prevailing scenario, we need to revisit the statement made by Admiral Michael Mullen, at the US Naval War College, in June 2006, which continues to hold relevance. '... the economic tide of all nations rises, not when the seas are controlled by one, but rather when they are made safe and free for all'. These words give us a feeling of deja vu - remember the prophecy propounded by Hugo Grotius exactly 400 years ago of 'Mare Liberum' (the free sea).

It is within this somewhat fragile security environment that the Indian Navy must protect, preserve and further India's maritime interests. Let me very briefly touch upon the more important of these. To start with, as much as 90 per cent by volume and 77 per cent by value of India's foreign trade transits the seas. Thus, to all intents and purposes, India is an island nation. Our coastline of 7516-kilometres faces significant security challenges. The 13 major and 185 minor ports that stud the coastline constitute the landward-ends of our sea lines of communication and constitute a major national maritime interest.

Our exclusive economic zone is 2.02 million km² in area. Once the Continental Shelf is fully delineated by the middle of 2009, this area is expected to increase to about 2.54 million km², which will compare quite favourably with the 3.06 million km² of the country's land area.

Our exclusive economic zone is rich in fish, and the preservation and protection of this vital resource is another major maritime interest. We remain aware that unchecked poaching activities all-too-often lead first to commercial smuggling and then to the illegal ingress of arms and ammunition, drug and human-trafficking, acts of piracy, and, the creation of 'havens' for all kinds of unsavoury characters, including terrorists. Consequently, the prevention of poaching through regular patrolling is an activity that principally involves the Indian Coast Guard, but often involves the navy as well.

Another major national maritime interest that shapes the growth of the Indian Navy is defined by the under-sea mineral resources that lie within our allotted mining area of some 150,000km² in the central Indian Ocean. This mining site is over 1200nm from the southern-most tip of the Indian mainland and the capabilities of the Indian Navy need to be structured appropriately in terms of sustained-reach, sea-keeping ability, passage-endurance and staying power.

Antarctica too, is a major maritime interest of India, not so much because it might one day yield mineral resources, nor because of its potential as a huge petroleum reservoir, nor even because of its nutrition-based abundance by way of krill, but because Antarctica determines in significant measure, the Indian monsoon, upon which our agriculture and hence our economy, depends.

It would, by now, be obvious that the primary area of Indian maritime interest ranges from the Arabian Gulf in the north, to Antarctica in the south, and, from the Cape of Good Hope and the East Coast of Africa in the west, to the Malacca Strait and the archipelagos of Malaysia and Indonesia, in the east.

It would be equally obvious that as the Indian economy grows, we are increasing investments offshore to ensure the availability of energy and enhanced mineral-resources that are required to fuel this economic growth. This is gradually defining what may be called our secondary area of maritime interest, which extends all the way from Sakhalin to South America.

Today, the huge energy resources of the Indian Ocean region are driving particularly strong maritime connectivities between the Indian and the Pacific oceans, and this has significant security overtones. I would like to emphasise that

the term 'Asia-Pacific' includes both, 'Asia' and the 'Pacific' and neither word can be unduly emphasised at the cost of the other! Indeed, in both these oceanic spaces, trans-regional geo-strategy, as well as geo-politics, is being shaped by the ongoing shift in the overall Asian power structure caused by the simultaneous rise of China, Japan, India and, by the grown stature of ASEAN. India is fully alive to the need to manage these connectivities in not only a non-disruptive manner, but, if at all possible, in a synergistic one as well. Let me therefore say a word or two about China, Japan, and ASEAN.

There are very marked similarities between India and China where both are being driven by economic imperatives to the development of a true maritime strategy - one that cannot easily be connected by a geographically contiguous line centred upon a core land-area. We appreciate that the economy is China's greatest strength and also its greatest vulnerability and, therefore, it is the centrepiece of the country's policy and strategy. This is equally true of India, as well.

Oil consumption in both countries is growing so rapidly that it is driving their foreign policies and security perspectives and, by extension, the maritime strategies of both.

The principal sources of supply for both countries, lie either in the Indian Ocean, or must travel across the Indian Ocean - which is precisely why, as our economies grow, considerable wisdom and forbearance are going to be needed to ensure that resource competition does not become conflict. China (including Hong Kong) is today India's largest trading partner, having surpassed the United States. These are robust economies that I am speaking about. In 2006-07, China and India together accounted for about 40 per cent of global growth measured in purchasing power parity terms.

And how do we see Japan? Japan and India, too, share many of the security features concerned with seaborne import of energy. Japan represents to India, a maritime partner with whom we have historically had only cooperation and never confrontation. Our bilateral trade is growing steadily and we are increasingly finding a confluence of our strategic maritime interests. Like China, Japan too must draw a significant proportion of her energy either 'from' or 'across' the Indian Ocean and is critically concerned with not just the degree of her 'energy security', but also the maritime 'security of energy'. I hardly need to point out that this is not a mere matter of semantics. The degree of energy security is simply the extent to which the available and assured energy exceeds the demand. The maritime security of energy, on the other hand, is the physical and fiscal security of the actual flow of energy, on or under the sea. With India's growing investments in Sakhalin and the sourcing of Indian oil and gas from that region, the energy security of India and Japan is becoming increasingly interdependent. We see Japan as a benign and powerful player, and are watching the transformation of that country's maritime security structures with interest and anticipation.

The ten countries of ASEAN constitute a critically important component of maritime security, acting as they do as the gateways connecting the Indian and

Pacific oceanic regions. There are many overlapping bilateral and multilateral security constructs, forums and groupings in the Asia-Pacific region, and ASEAN is at the core of many of them. An important aspect of both maritime diplomacy and international security, is that the conventional limiting lines of geographic regions are themselves getting increasingly blurred. The Indian Navy means to give both meaning and vigour to the nation's 'Look East' Policy. East Asia and Southeast Asia today form India's largest trading bloc, way ahead of the European Union and the United States. Indeed, the 'fleshing-out' of this 'Look East' Policy automatically brings-in maritime diplomacy to the centre of the 'international security' stage.

Maritime diplomacy is of particular relevance in our day and age, and the Indian Navy realises that although the problems of holistic-security in the Indian Ocean are enormous, so there are also opportunities. The concerted and cooperative effort of the littoral countries of the Malacca Strait (Malaysia, Indonesia and Singapore) has led to a dramatic decrease in depredations such as 'armed robbery at sea'. On the western flank of the region, the efforts of the multi-national Task Force 150 in limiting the incidents of piracy off the coast of Somalia need to be appreciated and, although functioning outside the ambit of Task Force 150, India too, has been making its own contribution in this regard. All across the Indian Ocean region, there are signs of hope, and actions that are founded upon determination and resolve.

The Indian Navy, like any other navy, operates along all three sides of the standard naval pyramid of roles. Today, more than ever before, we feel that it is the 'diplomatic role', as embodied by 'constructive engagement', is what we need to concentrate upon. We believe, for instance, that the constructive engagement of regional and extra-regional navies enables interoperability in all its senses and serves to enhance maritime domain awareness.

In order to maximise benefits, we need to engage in both directions along the axis of perceived maritime capability: not just with navies as advanced or more advanced than our own, but equally, with navies for whom our engagement will build capacity and enhance confidence. We believe that it is precisely this patient and step-by-step process of building capacity and enhancing capability, especially amongst the smaller littoral states of the region that will transform some of the security-related fragility of the Indian Ocean littoral into robustness born of self-confidence and self-sufficiency.

Cooperative mechanisms for the speedy and effective application of maritime power for regional humanitarian assistance and disaster relief operations form an obvious and important aspect of this constructive engagement. Yet, it took the Indonesian tsunami of 2004 to drive this home. The widespread publicity that was accorded to the regionally-inclusive evacuation undertaken in July 2006 when warships of the Indian Navy, moved as many as 2280 nationals of India, Sri Lanka, Nepal, Lebanon, and even Greece, to safety from war-ravaged Lebanon, highlights the utility of having forces able to extract non-combatants and civilians from distant lands. With the recent example of the Yogyakarta earthquake of 2006 in Indonesia, and the even more recent devastation caused by Cyclone Sidr that struck Bangladesh

in November 2007, the importance of working towards interoperability right from the planning and induction process of new platforms is obvious.

In order to encourage and focus the process of constructive engagement amongst the littoral states of the Indian Ocean region, the Indian Navy will in February 2008, host the inaugural event of a newly set-up consultative, cooperative, and inclusive regional forum, called the Indian Ocean Naval Symposium (IONS). IONS is based firmly upon the principles of sovereign equality, territorial integrity, political independence, non-interference in internal affairs, peaceful co-existence, mutual respect, and, the collective good of all countries of the Indian Ocean region. It seeks to increase maritime cooperation among 'navies' of the littoral states of the Indian Ocean region by providing a forum for discussion of regionally relevant maritime issues and, in the process, endeavours to generate a flow of information and opinion between naval professionals that would lead to common understanding and possibly agreements on the way ahead. Of course, the term 'navy' is used within the IONS initiative only in a generic sense and for such countries as do not possess a formally established 'navy', the term is applicable to the 'principal maritime agency'.

At this point in time, therefore, 'IONS is geographically restricted to countries of the Indian Ocean region alone. However, it is very probable that the membership will shortly be expanded to include 'observers' and become even more inclusive.

The inaugural event of the IONS initiative is the *IONS Seminar 2008*, which is being jointly conducted by the Indian Navy and the National Maritime Foundation, in New Delhi, over 14-15 February 2008. The theme of the seminar is *Contemporary transnational challenges - international maritime connectivities*. While the chiefs of navy of the Indian Ocean region states will, of course, be the principal invitees to the seminar, the various papers at the seminar would be presented by acknowledged experts of global renown, drawn from India and abroad.

The boom in regional naval growth offers a unique window of opportunity to all of us within the Asia-Pacific region. On the one hand, there is a need for structures such as IONS to be supported and we wish to place on record our thanks for the support that we have, thus far, enjoyed. On the other hand, there is a manifest need for existing mechanisms such as 'navy-to-navy' and 'military-to-military' staff talks to be aggressively and imaginatively used to promote interoperability, right from the design stage of new-construction platforms onwards.

On that note of hope, let me conclude by saying that interoperability through constructive engagement, is I believe, the key to unlocking the potential of our maritime century.

PART 6

Australia

International Law Perspectives on Trans-Tasman Maritime Security

Natalie Klein, Joanna Mossop and Donald R Rothwell

The international legal environment for the activities of the Royal Australian Navy and other navies in the Asia-Pacific region has changed dramatically since 11 September 2001. Governments and organisations like the International Maritime Organization (IMO) have sought to improve counter-proliferation and counter-terrorism efforts, as well as seeking better means to improve international shipping and secure important sea lanes through new treaties, rules and regulations. The increased effort in this regard cannot overshadow other ongoing security concerns and legal responses stemming from illegal fishing, whaling, transnational crime and environmental degradation. Policy considerations, operational issues, as well as the law have a bearing on how these challenges are to be addressed.

This paper will focus on outlining some of the global and regional legal developments in maritime security that have occurred since 11 September 2001, and explain how these sit within the international law framework with which navies and other policing authorities are already familiar. The paper will also address more specifically Australia and New Zealand's respective responses, initiatives and challenges to enhancing maritime security under international law.

An Expanding Concept of Maritime Security

Discussions about maritime security frequently focus on criminal activities with an impact on shipping, such as piracy. Since 11 September 2001, a number of international initiatives have focused global attention on the potential impact that maritime terrorism could have on the world's economy. The 2005 Protocol to the *Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation* (SUA Convention) and the Proliferation Security Initiative (PSI) respond to real concerns about terrorism and proliferation of weapons of mass destruction (WMD). However, it is clear that navies and law enforcement agencies are concerned about a range of activities beyond these more traditional concerns that undermine a nation's security. Arguably, for Australia and New Zealand, other threats from the marine sector involve equally serious risks for national security. In particular, a local definition of maritime security would have to include illegal harvesting of resources such as fisheries, transnational crime including drug and people smuggling, environmental crimes and potentially biosecurity concerns.

It is recognised that ultimately it is possible to characterise almost every activity at sea as having a security aspect. However, modern navies and law

enforcement agencies are faced with undertaking a range of tasks at sea beyond a traditional warfare role, including enforcement of fisheries and customs laws and regulations. It is also arguable that Australia and New Zealand will have different priorities resulting from their geographical position. For example, in the case of Australia its close proximity to Southeast Asia means that piracy and illegal immigration will have a higher priority than for New Zealand.

The Intersection of Maritime Security with International Law and Policy Counter-terrorism and Counter-proliferation

Several initiatives have been launched in recent years to respond to the possibility of vessels being used for terrorist purposes, or the shipment of WMD to terrorist organisations. In doing so, these arrangements have had to account for legal principles that regulate the amount of authority any state, or its navy, has (or lacks) over a vessel in different parts of the oceans.

PROLIFERATION SECURITY INITIATIVE

The PSI was initially conceived as a 'collection of interdiction partnerships', and entails a series of political, rather than legal, agreements.² The Statement of Interdiction Principles adopted by participants is not legally binding, but still anticipates that the relevant actors will conform to existing legal norms.³ As states have the most authority over their ports, internal waters and territorial seas,⁴ the PSI commitments involve the participant states taking appropriate action, such as stopping and/or searching vessels, or enforcing conditions on vessels that enter or leave ports, in respect of vessels that are reasonably suspected of carrying cargoes of proliferation concern in these areas.⁵ Equally, state authority over flag vessels means that PSI participant states were able to commit to taking action to board and search any vessel flying their own flag when those vessels are outside the territorial waters of another state.⁶ Participant states will also give serious consideration as to whether other states should be permitted to board and search their flag vessels in pursuit of the PSI objectives.⁷

From a legal perspective, the PSI is constrained in its operation by long-standing jurisdictional limitations on when a navy or other government authority may stop and board vessels outside territorial waters. Yet this is not a matter that can be simply assessed against the framework of the law of the sea as there is also the dimension of UN Security Council Resolutions creating new international legal obligations for member states, or which seek to modify existing international legal principles whether found in custom or treaty. For example, UNSC Resolution 1540 seeks to outline a range of measures Member States should take to combat the proliferation of nuclear, chemical and biological weapons which it is considered constitute a 'threat to international peace and security'. States are called upon to not provide support to non-state actors dealing with WMD and to develop appropriate domestic measures to that end including halting domestic proliferation. The

Resolution also calls upon States to cooperate on non-proliferation issues including 'in accordance with their national legal authorities and legislation and consistent with international law, to take cooperative action to prevent illicit trafficking in nuclear, chemical and biological weapons, their means of delivery and related materials." The highest the obligation within this part of the Resolution can be put is that Member States have an obligation to cooperate to stop the proliferation of WMD. However, their actions must remain consistent with international law. Such international law would clearly extend to the law of the sea. While UNSC Resolution 1540 provides a potential basis for cooperation amongst Members States to stop WMD proliferation, it needs to be clearly distinguished from other Security Council Resolutions which have provided an unequivocal foundation for interdiction. For example, under the UN sanctions regime imposed against Iraq following the 1990-91 Gulf War, UN-mandated interdiction operations were conducted against certain vessels in the Arabian Gulf.9 It is very doubtful whether UNSC Resolution 1540 has similar effect.¹⁰ The 2005 amendments to the SUA Convention may also provide a basis for aspects of the PSI.11 While the 2005 Protocol does seek to extend the SUA Convention to address vessels carrying WMD, it only does so in cases where there exists 'reasonable grounds' for suspecting an offence under the Convention or where the flag state has consented to an inspection taking place.¹²

What becomes apparent then from a review of the relevant law is that the international legal basis for some of the interdiction elements of the PSI is slim. Whilst the United States can also no doubt point to the existence of various 'shiprider' and 'flag-of-convenience bilaterals' permitting interdiction of vessels flying certain flags, 13 these provide only limited additional legal cover and most certainly do not extend to the many US partners who have signed up to the PSI such as Australia and New Zealand.

INTERNATIONAL SHIP AND PORT FACILITY SECURITY CODE

The *International Ship and Port Facility Security* (ISPS) *Code* was developed as an amendment to the *International Convention for the Safety of Life at Sea 1974* (SOLAS) and came into force in July 2004. The ISPS Code sets out mandatory requirements for governments, port authorities and shipping companies intended to minimise the extent of risk to which a port is exposed and what measures need to be put in place in relation to the assessed risk at any one port. To reduce vulnerabilities, ships 'will be subject to a system of survey, verification, certification and control to ensure that their security measures are implemented'. These developments are again consistent with existing law related to a coastal state's sovereignty over its ports, and provide the benefit of articulating an internationally-acceptable procedure to deal with risk. However, this consistency with existing legal principles means that enforcement powers over vessels assessed as risks are limited to the ports and surrounding territorial seas – in other words, areas close to shore where it may be undesirable to have such a vessel.

SUPPRESSION OF UNLAWFUL ACTS AGAINST THE SAFETY OF MARITIME NAVIGATION

In 2005, states at the International Maritime Organization adopted a protocol to the SUA Convention.¹⁷ This 2005 Protocol expanded the range of offences set forth in the 1988 Convention over which states could establish jurisdiction, and created a means to exercise that jurisdiction over vessels and the persons on those vessels. As such, the 2005 Protocol sets out procedures by which states parties may request that flag states of suspect vessels consent to the boarding of their vessels outside the territorial sea of any state. 18 States parties may either consent on an ad hoc basis, provide prior consent by notification to the IMO Secretary-General, or consent implicitly if prior authorisation is notified to the Secretary-General and no response to a request is forthcoming after four hours. For boarding to be authorised under the 2005 Protocol, a requesting state must have 'reasonable grounds to suspect that the ship or a person on board the ship has been, is or is about to be involved in the commission of one of the offences set out in the original treaty or the 2005 Protocol.¹⁹ The flag state may then authorise the boarding by the requesting state either on its own or with officials of the flag state and in either instance subject the boarding to any conditions relating to responsibility for and the extent of measures to be taken.²⁰ Alternatively, the flag state may conduct the boarding and search the suspect vessel itself, or just decline to authorise a boarding and search.²¹ Through this boarding procedure set down in the 2005 Protocol, there is potentially a means to accord navies and policing authorities with authority that was otherwise lacking under international law.

LONG-RANGE IDENTIFICATION AND TRACKING

The need for improved intelligence about shipping in order to achieve counterterrorism and counter-proliferation goals has been recognised most recently in a further amendment to the SOLAS Convention.²² The addition of Regulation 19-1 creates a system for the long-range identification and tracking of ships through the automatic provision of information on the identity of the ship, the position of the ship (latitude and longitude), and the date and time of the position provided.²³ This information may be provided to flag states, to states where the ship has indicated its intention to enter their ports and to coastal states when a ship is navigating within 1000nm of its coast, even if the ship is not entering its port.²⁴ In many respects, Regulation 19-1 achieves what Australia sought to do unilaterally at the end of 2004 in declaring the Australian Maritime Identification Zone.²⁵ The new system has its limitations, however. States parties to the SOLAS Convention may decide that ships flagged to it do not have to provide information to coastal states 'in order to meet security or other concerns'.26 Moreover, enforcement powers are not bolstered in any way by the new regulation, as the only recourse for states in the event that the information is not provided is to report to the IMO cases of non-adherence.²⁷ Certainly no new rights of interdiction have been created.

Illegal Fishing

Illegal fishing can undermine management efforts for the exploitation of living resources, which constitutes a significant economic asset for coastal states. In recognition of the importance of regulating fishing activities, international organisations have been created for the conservation and management of specific species or to cover particular areas of the ocean, such as the Commission for the Conservation of Southern Bluefin Tuna²⁸ and the *Convention for the Conservation of Antarctic Marine Living Resources* (CCAMLR).²⁹ Consistent with these regimes, states have dedicated considerable resources through maritime patrols over large and sometimes remote ocean areas.

However, illegal, unreported or unregulated (IUU) fishing undermines these efforts and may represent threats to the economic and environmental security of a state. In a variety of respects, the legal and practical tools available to respond to this activity have been insufficient.³⁰ Policing remains problematic when vessels flagged to non-members of these regimes continue to fish the protected species and even when such a vessel may be stopped and seized, authorities are limited in the conditions they may impose on the vessel to prevent it from re-offending.³¹ These are issues which Australia and New Zealand have particularly encountered with respect to their Southern Ocean fisheries due to the vast ocean spaces under their control and the challenges faced in implementing an effective enforcement regime.

Gradually sub-Antarctic states such as Australia and New Zealand have individually and collectively sought to tackle the problem of IUU fishing in the region. More assets have been deployed in a policing role including fixed-wing aircraft, patrol boats, naval craft, and in some instances specially fitted-out craft designed to be at sea in the Southern Ocean on lengthy patrols. Australia, with no viable port within the region, has been forced to deploy assets to and from the mainland. New Zealand, with its sub-Antarctic islands less distant, has been more readily able to deploy air patrols. With enforcement capacity compromised in the sub-Antarctic due to climatic and environmental conditions plus the distance from operating bases, it is not surprising that several law enforcement operations against IUU fishers have raised significant legal and policy challenges. Australia, in particular, has been forced on two occasions to engage in long-distance hot pursuit of suspected illegal fishing vessels fleeing the sub-Antarctic; one pursuit ending off the coast of South Africa with the assistance of South African authorities and another ending in the South Atlantic.³² In response to these regional maritime enforcement challenges, Australia and France in 2003 entered into a Treaty designed to enhance cooperative surveillance in the Southern Ocean,³³ and in 2007 adopted an additional Treaty to provide for cooperative enforcement of their respective fisheries laws.³⁴ In addition, there have been ongoing discussions amongst Australia, France, New Zealand and South Africa regarding informal cooperative enforcement and surveillance mechanisms for the region. The result of these initiatives has been a strengthening of the legal enforcement regime to deal with IUU fishing in the sub-Antarctic. However, gaps remain in the enforcement regime raising issues as to whether more

comprehensive sub-regional enforcement mechanisms are necessary. It is likely that regional fisheries management organisations will continue to explore boarding and inspection regimes that give roles to non-flag states.³⁵

Whaling

Australia and New Zealand are parties to the International Convention for the Regulation of Whaling 1946 (ICRW), an instrument that originally sought to promote commercial whaling but which over time has evolved a broader focus including the conservation of whales. This is currently reflected in a moratorium on commercial whaling, which began in 1986, and the subsequent declaration of a Southern Ocean Whale sanctuary which encompasses waters south of 60°S. Notwithstanding the moratorium, in 1987-88 Japan introduced the Japanese Whale Research Program under Special Permit in the Antarctic (JARPA) and continued this program until the 2004-05 season.³⁶ JARPA was essentially a program designed to undertake 'research' into Southern Ocean whale stocks, with a principal focus upon minke whales. In 2005, Japan announced its intention to conduct the second phase of the Japanese Whale Research Program under Special Permit in the Antarctic (JARPA II) from the 2005-06 season. Feasibility studies were conducted for the first two years and the full-scale program commenced during the 2007-08 season. Projected annual sample sizes were 850 (±10 per cent allowance) minke whales, 50 humpback whales, and 50 fin whales. However, following widespread opposition to the JARPA II program, particularly from the newly elected Rudd Government in Australia,³⁷ Japan announced in late December 2007 that it was suspending for the time being the planned take of humpback whales.38

Notwithstanding these developments, the JARPA II program of research in the Southern Ocean is proceeding. Japan's actions pose security threats inasmuch as protestors to this activity have confronted whaling vessels at sea and allegations of ramming vessels have been made by both sides.³⁹ In March 2008, the International Whaling Commission (IWC) condemned the 'dangerous actions' of protestors against the Japanese whaling vessels, whereas the protestors in turn have accused the Japan Coast Guard of firing at them.⁴⁰ These actions threaten the safety of lives at sea, an issue regulated under international law,⁴¹ and may potentially require intervention by government authorities to reduce such risks.

The maritime security dimension of whaling in the Southern Ocean was particularly highlighted by two events in 2007 which had particular impact for New Zealand. The first was the fire which broke out on board the *Nisshin Maru* – the largest vessel in the Japanese whale fleet – which resulted in the death of one crew member and the vessel being disabled for a week. A few days previously the *Nisshin Maru* had an encounter with the Sea Shephard protest vessels – *Farley Mowat* and the *Robert Hunter* – during which time a dinghy being used by the protestors was swamped and partly lost at sea for eight hours. ⁴² Both of these incidents highlighted New Zealand's maritime search and rescue responsibility for vast areas of the Southern Ocean, and were raised separately by New Zealand and Japan at the

2007 IWC Meeting in Anchorage, Alaska resulting in the adoption of a unanimous resolution regarding safety at sea and protection of the environment.⁴³

These events raise questions relating to the exercise of jurisdictional authority in Antarctic waters, as well as the interpretation and application of rules and regulations under the ICRW. The use of military and civilian assets to undertake surveillance and monitoring of Japanese whaling activities⁴⁴ also highlight the expanding scope of contemporary maritime security issues for both Australia and New Zealand in the Southern Ocean, offshore Antarctica and within the Antarctic Treaty area; an area which up until relatively recent times has not proven contentious because of the Treaty's seeming capacity to remove the region from security or sovereignty concerns.⁴⁵

Transnational Crime

The transport of drugs, contraband and illegal migrants are viewed, in different ways, as a threat to the good order of the states. Naval vessels have been used to intercept the passage of illegal immigrants, as well as to rescue asylum seekers aboard sinking vessels. Naval and policing resources are also directed towards trafficking of narcotics and other contraband. These activities are constrained by a range of international treaties, ⁴⁶ and other agreements that delineate when, where, how and why vessels may be stopped, inspected and potentially arrested or turned around.

Environment

Pollution is a threat to the environmental security of the coastal state. Marine pollution may prove problematic to the use of international shipping lanes, as well as areas viewed as pristine and essential to the ecology of an area, or even to the climate of the planet. Environmental security is important to economic security when issues related to the conservation and management of fish resources are taken into account. Environmental security also links in to repercussions of a possible terrorist attack, as damage to an oil tanker or vessel carrying liquefied natural gas may cause devastating harm to the surrounding area – closing off areas to maritime traffic or requiring restricted movement while clean-up operations are undertaken.

Achieving Universal Coverage of International Maritime Instruments in the Region

This brief survey of international initiatives illustrates a particular challenge when operating at a global level, which is ensuring that all states accept the changing international rules. In the Asia-Pacific region there is still inconsistent ratification of treaties that confer jurisdiction or require cooperation at sea, as indicated in the survey of ratifications of some maritime security related conventions, contained in Appendix One. Although ratification of major conventions such as the SUA Convention has increased in recent years, there are still important gaps in Southeast Asia and the Pacific including some of Australia's closer neighbours.

Ratification of a treaty is only the first step. Where states have ratified the conventions, questions must arise as to the extent to which they have been effectively implemented.⁴⁷ Although Australia and New Zealand are in a position to fully implement international conventions, many of their partners in Asia and the Pacific are not. Capacity building projects may be necessary to ensure that partner states are in the best position to implement conventions and cooperate with authorities from Australia and New Zealand. Such projects are underway through bilateral aid relationships⁴⁸ and through regional organisations such as the Pacific Forum, but arguably further could be done in this regard.⁴⁹

Ensuring Consistency Between the Domestic and International Legal Framework

One major issue for navies and other law enforcement agencies is ensuring that the domestic legislative framework supports their activities. Whether operating at a domestic level or on the international stage, having a sound legal basis for activities is important to avoid undermining the goal of the particular mission. For example, if an Australian naval vessel intercepts a foreign flagged vessel in Australia's territorial sea as part of the PSI, the basis for exercising jurisdiction over the vessel must be consistent with Australian law, or any subsequent prosecution would be jeopardised. Similarly, a detention of a foreign flagged vessel contrary to international law risks the possibility, at worst, of a legal claim invoking state responsibility for damages, or at best a difficult diplomatic incident.⁵⁰

The legislative provisions regarding hot pursuit in the case of fisheries violations in Australia and New Zealand provides an illustration of this concern. Under Australian law, section 87 of the *Fisheries Management Act 1991* implements the provisions of article 111 of the *United Nations Convention on the Law of the Sea 1982* (LOSC) regarding hot pursuit, but does not require an order to stop ⁵¹ As Gullet and Schofield have pointed out, this could result in a situation where a hot pursuit of a fishing vessel may be considered to be consistent with Australian domestic law but inconsistent with international law.⁵²

New Zealand's legislation is similarly flawed. Section 215 of the *Fisheries Act* 1996 does not actually refer to a right of hot pursuit, but authorises arrest of a fishing vessel 'beyond New Zealand waters' if it has been 'freshly pursued'. As in the Australian legislation there is no requirement for a stop order to be given prior to commencing pursuit, and there is no reference to the doctrine of constructive presence, nor to the requirement to break off pursuit when the vessel enters the territorial sea of another state. At best, this situation risks a similar outcome to the Australian legislation, where action could be legal in domestic courts but found to be illegal by an international tribunal. In New Zealand's case, however, there is also the risk that in exercising a right inconsistently with the international law that confers the right, the action could be considered to be inconsistent with domestic law as well. New Zealand courts have been willing to view domestic law as constrained by international obligations even where there is no ambiguity in

the legislation.⁵³ This is reinforced by s5 of the *Fisheries Act 1996*, which requires the Act to be interpreted consistently with New Zealand's international obligations relating to fishing, arguably including article 111 of the LOSC. A final point to be noted about hot pursuit in New Zealand is that hot pursuit is authorised under domestic legislation for fisheries matters, but not when exercising powers under customs legislation.⁵⁴

The Integrity of the International Law Framework

In the rush to develop appropriate responses to the international security threats highlighted by the events of 11 September 2001, there has been a risk that the international community may seek to override some of the fundamental principles upon which the international legal system has been based. This has certainly been part of the refrain in international human rights law, and international humanitarian law, and the law of the sea has not been immune from this trend. In addition to issues as to whether newly developed domestic laws and policies of states comply with international law, there is also the issue of consistency of new international initiatives with the existing legal framework. This question has been particularly highlighted by attempts to reconcile the PSI with the LOSC, which inevitably has to occur outside of the framework of the law of the sea and this raises an issue as to whether there has in recent years been an attempt to amend the LOSC by stealth. Negotiated during the 1970s, concluded in 1982, and not entering into force until 1994, the LOSC has had a much longer gestation period than many equivalent large multilateral instruments. This perhaps is justifiable given the importance attached to the LOSC and its status as a 'Constitution for the Oceans'. Yet, for any treaty regime to have ongoing relevance and attraction to its parties, even one having the status of effectively a constitutive instrument for the whole regime, it must be capable of evolution. As Scott has observed:

A multilateral treaty is integral to a dynamic set of political relationships. The legal structure may need to respond to changes in the environment in which it functions if it is to meet the challenges to the logical nexus that is its backbone.⁵⁵

This is a challenge which certainly confronts the LOSC especially if it is to remain to be seen as a 'Constitution' which is not static and fixed at the time of its adoption in 1982. Evolution of the LOSC therefore needs to be addressed and both its strengths and weaknesses need to be understood.⁵⁶

Whilst the LOSC provides a sound foundation for the legal framework governing the oceans, it contains a number of weaknesses reflective of its 1970s roots and highlighted by contemporary principles of oceans governance. For example, the Part XII environmental framework fails to fully develop principles of marine environmental management that were beginning to be recognised in the 1970s following the 1972 Stockholm Conference and which have gained further acceptance following the 1992 Rio Conference and developments in international

environmental law. The same could be said with respect to maritime security, over which the LOSC is largely silent other than recognising the inherent security interests of coastal and archipelagic states. Notwithstanding the Article 301 invocation of states refraining from the use of force on the oceans, and the related Article 300 obligation of exercising rights and freedoms under the LOSC in good faith, this has not constrained all states and especially the major naval powers from continuing to engage in military activities on the oceans. However, while these aspects go particularly to issues of national maritime security, the silence of the LOSC on issues of regional and global maritime security in the wake of the upsurge of terrorist attacks has exposed a particular contemporary gap.

Concluding Remarks

It is clear that maritime security is a dynamic and evolving concept which has expanded considerably over the past century, and even in the 25 years which have followed the conclusion of the LOSC. While the legal regime has in the past lacked focus, a number of initiatives have been undertaken in the international legal sphere during the past six years and these are gradually closing gaps to ensure that the legal authority exists to permit the necessary steps to promote maritime security goals. In some respects, they are quite complementary, but limitations remain. From an operational perspective, there will need to be several points of reference to determine what action will be permitted in any particular situation as there is no comprehensive 'one-stop' international legal instrument which can be referred to.

As coastal states seek to enhance their maritime security regimes in reliance upon the expanding international legal framework, it will be important to ensure that the domestic legislation provides naval and policing agencies with the powers that they are permitted, and occasionally required, to exercise to support international and regional maritime security initiatives. At times the domestic legislation is clear and precise, while in other instances it needs to be read alongside international law obligations.⁵⁷ Harmonisation of the national legal regime with the international legal regime will continue to present challenges. To the extent necessary, Australia and New Zealand should maintain assistance to their smaller neighbours in the alignment of domestic legal regimes and thereby ensure implementation of these laws consistently with the standards presently being set under international law.

Appendix 1 – Involvement of Asia Pacific States in Legal Conventions⁵⁸

Country	Territory of	LOSC	CITND	UNTNOC	UNTNOC P1	SOLAS	SOLAS P'78	SOLAS P'88	SUA	SUA P'88	PSI
Australia		Y	Y	Y	Y	Y	Y	Y	Y	Y	C
Bangladesh		Y	Y			Y		Y			
Bhutan		S	Y						Y	Y	
Brunei Darussalam		Y	Y			Y	Y		Y	Y	
Cambodia		S	Y	Y	Y	Y	Y	Y	Y	Y	
China		Y	Y	Y		Y	Y	Y	Y	Y	
Cook Islands		Y	Y	Y		Y		Y	Y		
Federated States of Micronesia		Y	Y	Y					Ā		
Fiji		Y	Y			Y	Y	Y			
French Polynesia	France	Y	Y	Y	Y	Y	Y	Y	Ā	Y	C(F)
Guam	United States		Y	Y	Y	Y	Y	Y	Y	Y	C(US)
India		Y	Y	S	s	Y	Y	Y	Ā	Y	
Indonesia		Y	Y	S	S	Y	Y				
Japan		Y	Y	S	S	Y	Y	Y	Λ	Y	C
Kiribati		Y		Y	Y	Y	Y	Y	Ā	Y	
Korea (DPRK)		S	Y			Y	Y	Y			
Korea (ROC)		Y	Y	S	S	Y	Y	Y	Y	Y	
Lao People's Democratic Republic		Y	Y	Y	Y						
Malaysia		Y	Y	Y		Y	Y				
Maldives		Y	Y			Y		Y			

Country	Territory of	LOSC	CITND	UNTNOC	UNTNOC P1	SOLAS	SOLAS P'78	SOLAS P'88	SUA	SUA P'88	PSI
Marshall Islands		Y				Y	Y	Y	Y	Y	
Mongolia		Y	Y			Y	Y	Y	Y	Y	
Myanmar		Y	Y	Y	Y	Y	Y		Y	Y	
Nauru		Y		S	S				Y	Y	
New Caledonia	France	Y	Y	Y	Y	Y	Y	Y	Y	Y	C(F)
New Zealand		Y	Y	Y	Y	Y	Y	Y	Y	Y	
Niue		Y									
Pakistan		Y	Y	S		Y	Y	Y	Y	Y	
Palau		Y							Y	Y	
Papua New Guinea		Y				Y					
Philippines		Y	Y	Y	Y	Y			Y	Y	
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Samoa		Y	Y			Y	Y	Y	Y		
Singapore		Y	Y	Y		Y	Y	Y	Y		C
Solomon Islands		Y				Y					
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Timor-Leste											
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Territory of				cipant		n Against Illicit Traffi	ı on the Law of the Sa	iative (List does not	for the Safety of Life c			ssion of Unlawful Act	ention on the Suppre	n Against Transnation	ggling of Migrants by
Country	Sé			Y Ratified Party/Participant s Signatory only C Core Member	eviations	United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substancts 1988	United Nations Convention on the Law of the Sea 1982	Proliferation Security Initiative (List does not include cooperating members apart from 'foundation' members)	International Convention for the Safety of Life at Sea 1974	SOLAS 1978 Protocol	SOLAS 1988 Protocol	Convention on the Suppression of Unlawful Acts Against the Safety of Maritime Navigation 1988	Protocol to the SUA Concention on the Suppression of Unlawfull Acts against the Safety of Fixed Platforms Located on the Continental Shelf	United Nations Convention Against Transnational Organised Crime 2000	Protocol against the smuggling of Migrants by Land, Sea and Air
	United States	Vanuatu	Vietnam	Key	List of Abbreviations	CITND	LOSC	PSI	SOLAS	SOLAS P'78	SOLAS P'88	SUA	SUA P'88	TNOC	TNOC P1

Australia's Antarctic and Southern Ocean Interests

Marcus Haward

The Australian Government is responsible for the management of the world's third largest exclusive economic zone (EEZ), with a maritime domain from the tropics to the Antarctic. Australia claims an extended continental shelf that provides an ocean domain of 16 million km² in area, roughly equivalent to double that of the nation's terrestrial land area. In addition Australia has responsibility for providing coordination of search and rescue capability for about ten per cent of the world's surface. 1 It also has concomitant responsibilities and obligations related to the ratification of international and regional instruments or regimes that affect management of areas outside national jurisdiction, and at the same time help shape Australian interests. Australia's regional and international interests are clearly shaped by its maritime domain that are, by definition, part of its external relations. Australia's most important foreign policy, security and economic interests are inextricably linked to the security and stability of the Asia-Pacific region, with the Royal Australian Navy (RAN) playing a major role in this security framework.² Threats to polar environments from human and environmental changes, such as those caused by climate change and technological developments are leading to increasing challenges to governance in polar areas, with the Antarctic and Southern Ocean in many senses on the 'front line' of these challenges.³

Over the past fifteen years Australia has played a major part in the reordering the 'law of the sea' with considerable impact on contemporary oceans governance, particularly related to fisheries. Most recently Australia's efforts have been directed at action to tackle the problem of what is now known as illegal, unreported and unregulated (IUU) fishing. This effort has involved active engagement in relevant regional multilateral fisheries management organisations (RFMOs). Australia has actively sought to encourage the development of emergent tools in the battle against IUU fishing, with a particular emphasis on bolstering port state and trade-related instruments. Australia has also worked bilaterally to further these campaigns. It has also been active in monitoring, control and surveillance within the Australian EEZ in the Southern Ocean, including extended hot-pursuits of vessels prior to their arrest.

Australia, the Antarctic and Southern Ocean

Australia claims 42 per cent of Antarctica, the world's driest, coldest and highest continent, in addition to the sub-Antarctic Territory of Heard and Macdonald Islands, and Macquarie Island – jurisdictionally part of the state of Tasmania. Australia's claim was made in 1933 during the 'Heroic Era' of Antarctic exploration between

c.1880-1945. Other states made territorial claims in this period: France (1924), New Zealand (1923), Chile (1940), Argentina (1943), the United Kingdom (1908) and Norway (1929 and 1939).⁷

Proclamations of Antarctic territory gave rise to potential (and actual) competing claims and helped shape Antarctic geo-politics for the 20th century. It is important, too, to recognise that the heroic age was also part of the 'Age of Empire', of colonisation of distant lands by European powers, with British imperial influence, by virtue of the scale of its colonial possessions, contributing to its role as a 'great power'. The establishment of claims, and disputes and differences over the status of territorial claims that contributed to 'the Antarctic Problem' that was eventually to be resolved by innovative provisions within the *Antarctic Treaty 1959*.8

The Australian Antarctic Territory (AAT) provides Australia with significant opportunities, obligations and responsibilities. Australia was a major player in the negotiation of, and remains an influential participant in the *Antarctic Treaty* and its related instruments and institutions. The *Antarctic Treaty*, while incorporating commitments to scientific collaboration, is also a significant security instrument; demilitarising a continent, creating the first nuclear free zone, and establishing an inspection regime that has been a model used in later security instruments.⁹

The Antarctic Treaty

The *Antarctic Treaty* was signed in 1959 by the 12 nations that had been active in Antarctica during the 1957-58 International Geophysical Year. The *Antarctic Treaty*, which applies to the area south of 60° South latitude, includes a commitment that Antarctica should not become the scene or object of international discord. Its success in achieving this aim over nearly half a century has occurred through the success of Article IV of the *Antarctic Treaty*, which states:

- 1. Nothing contained in the present Treaty shall be interpreted as:
- a. a renunciation by any Contracting Party of previously asserted rights of or claims to territorial sovereignty in Antarctica;
- a renunciation or diminution by any Contracting Party of any basis of claim to territorial sovereignty in Antarctica which it may have whether as a result of its activities or those of its nationals in Antarctica, or otherwise;
- c. prejudicing the position of any Contracting Party as regards its recognition or non-recognition of any other State's rights of or claim or basis of claim to territorial sovereignty in Antarctica.
- 2. No acts or activities taking place while the present Treaty is in force shall constitute a basis for asserting, supporting or denying a claim to territorial sovereignty in Antarctica or create any rights of sovereignty in Antarctica. No new claim, or enlargement of an existing claim, to territorial sovereignty in Antarctica shall be asserted while the present Treaty is in force.¹⁰

The Antarctic Treaty, in summary:

- stipulates that Antarctica should be used exclusively for peaceful purposes
 military activities, such as the establishment of military bases or weapons testing, are specifically prohibited
- guarantees freedom to conduct scientific research
- promotes international scientific cooperation and requires that the results of research be made freely available
- sets aside the potential for sovereignty disputes between Treaty parties by providing that no activities will enhance or diminish previously asserted positions with respect to territorial claims, provides that no new or enlarged claims can be made, and makes rules relating to jurisdiction
- · prohibits nuclear explosions and the disposal of radioactive waste
- provides for inspection to ensure compliance with the Treaty a world-first weapons inspection system
- requires advance notice of expeditions
- provides for the parties to discuss measures to further the Treaty.¹¹

The *Antarctic Treaty* now has 46 parties, 28 of whom are Consultative Parties (ATCPs) on the basis of being original signatories or by conducting substantial Antarctic research. Since entering into force in 1961, it has been recognised as a successful international agreement. Differences over territorial claims have been effectively set aside and as a disarmament regime it has been outstandingly successful.

The Antarctic Treaty System

The ATCPs remain firmly committed to a system that is still effective in protecting their essential Antarctic interests. Science is often described as 'the currency' of the Antarctic Treaty System (ATS), the regime centred on the Antarctic Treaty and its subsidiary and complementary instruments. 12 These instruments include the Convention for the Conservation of Antarctic Seals (CCAS), the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) and the Protocol on Environmental Protection to the Antarctic Treaty (Madrid Protocol). Scientific advice is central to CCAMLR, and the work of its Commission. The convention applies to Antarctic marine living resources in an area bounded to the north by a line that approximates the position of the Antarctic Convergence (now termed the sub-Antarctic Front) and to the south by the Antarctic continent. The Commission for the Conservation of Antarctic Marine Living resources (CCAMLR), and its Scientific Committee (SC-CCAMLR), is charged with using an ecosystem approach to the management of Antarctic marine living resources.¹³ Science is similarly embedded within the Protocol on Environmental Protection to the Antarctic Treaty, where Article 2 states 'The Parties commit themselves to the comprehensive protection of the Antarctic environment and dependent and associated ecosystems and hereby designate Antarctica as a natural reserve, devoted to peace and science'. The

focus on environmental protection has encouraged new, multi-disciplinary science programs amongst Treaty parties.¹⁴

The CCAMLR differs from other institutions within the ATS, as: while 'explicitly embedded' within the system, ¹⁵ it is clearly 'free standing'. ¹⁶ This has a number of consequences, including, *inter alia*, the relationship between the CCAMLR and the Committee on Environmental Protection, established under the Madrid Protocol. The establishment of the Antarctic Treaty Secretariat in 2004 completes the institutional framework administering the ATS that includes:

- Antarctic Treaty Consultative Meetings (ATCM)
- Scientific Committee on Antarctic Research (SCAR)
- Committee for Environment Protection (CEP)
- Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR)
- Standing Committee on Antarctic Logistics and Operations (SCALOP)
- Council of Managers of National Antarctic Programs (COMNAP).

The pursuit of Australia's interests in the ATS depends on an ability to negotiate positions in the following forums of the Treaty system, as well as the working groups and committees of these forums.

Australia's Interests

Australia has important interests in the Antarctic and the Southern Ocean.¹⁷ These interests are:

- sovereignty
- neutrality
- protection of the Antarctic environment
- Antarctic science
- involvement in Antarctica
- benefit.¹⁸

Haward (et al) noted that these key interests have also 'remained relatively stable, albeit developing and evolving', ¹⁹ and are embodied within current Australian Government goals for the Australian Antarctic Program:

- to maintain the Antarctic Treaty System (ATS) and enhance Australia's influence within the system
- to protect the Antarctic environment
- to understand the role of Antarctica in the global climate system
- to undertake scientific work of practical, economic and national significance. Sovereignty remains a significant, if understated interest. The intersection of rights and obligations under the *United Nations Convention on the Law of the Sea 1982* (LOSC) and those enshrined within the *Antarctic Treaty* has helped focus attention on sovereignty. The declaration of maritime zones off the AAT has been controversial, but resolved by not enforcing territorial sea rights. The question of delimitation of the continental shelf of the AAT posed important political and legal challenges to Australia, but also a dilemma in relation to its interests. Australia had

included the continental shelf of the AAT in its 1953 declaration of an Australian continental shelf, a move that pre-dated the negotiation and entry into force of the *Antarctic Treaty*. Failure to include the AAT in survey work and data collection for the extended continental shelf would have indicated Australia's weakening of its claims to sovereignty over the AAT.²²

The solution to this dilemma was relatively simple: Australia lodged data for its claims to an extended continental shelf and requested that the Commission on the Limits of the Continental Shelf not examine the data associated with the AAT.²³ The delimitation of the Antarctic continental shelf used a range of provisions available to Australia under Article 76 of the LOSC, including the 'sediment thickness formula', and as a result provided significant scientific data for further research.

Australia's Antarctic Program

The Australian Antarctic Program (AAP) was established in 1947. From an initial focus on activities on the sub-Antarctic islands in 1947, it has expanded to include activities on the Antarctic continent and the Southern Ocean. The AAP is administered by the Australian Antarctic Division (AAD), which is based at Kingston, near Hobart, Tasmania. The modern AAP embraces the activities in Antarctica of the AAD and other government agencies such as the Bureau of Meteorology, GeoScience Australia and some divisions of the Commonwealth Scientific and Industrial Research Organisation (CSIRO). It also involves non-government bodies and individuals, including staff and programs in universities around Australia, the Antarctic Climate and Ecosystems Cooperative Research Centre based at the University of Tasmania, and foreign scientists.

The AAD coordinates operations and logistics that underpin the AAP. This involves the chartering of the Australian flagged icebreaker *Aurora Australis* for resupplying Antarctic and sub-Antarctic stations and bases, movement of scientific and support personnel, and transport of equipment. Other vessels have been chartered to provide extra shipping capacity. The AAP is vulnerable, with interruptions to the program from vessel breakdown or incidents having considerable 'knock-on' effects. Provision of a second ice-class multi-purpose vessel would strengthen Australia's capability and enhance opportunities for the AAP.²⁴

The Antarctic Air Link

The 2007-08 Antarctic 'season' sees the first operational flights form Hobart to Antarctica.²⁵ In 2005 the Australian Government funded the AAD to establish an air link between Hobart and a snow capped blue ice runway near Casey Station. The air link will use a civilian long range Airbus A319 for a regular air connection each summer. The air link will enhance Australia's ability to support research in Antarctica and modernise the Antarctic program by significantly improving access to the AAT, and increase the efficiency, capacity, and flexibility of Australia's Antarctic science efforts.

In addition to improving emergency response capability the air link will enhance Australia's ability to protect its national interests – both directly through aerial surveillance to protect our Southern Ocean fisheries and indirectly through our ability to influence others Antarctic nations, including those operating in the AAT.

The International Polar Year

Australia is a participant in the third International Polar Year (IPY) between 1 March 2007 and 1 March 2009. The first International Polar Year occurred in 1882-83 with 12 expeditions to the Arctic and 3 to Antarctica, involving 12 countries. The second IPY established fifty years later in 1932-33 involved 44 countries. Developments in science and technology following World War II (WWII) encouraged further international collaboration on polar science, with a focus on emergent areas of space research. This led to the establishment of the International Geophysical Year (IGY) in 1957-58. The IGY was particularly influential in shaping Antarctic science and facilitating collaboration later embodied in the *Antarctic Treaty*.

The IPY (2007-09) – of two years duration to ensure full summer and winter scientific research in both poles – will see reporting of the science to continue through to 2012 and beyond. The IPY is expected to again provide a significant impetus to Antarctic science, but also provides an appropriate lens through which to examine current and future Australian policy interests in the Antarctic and the Southern Ocean, and likely opportunities arising from, and any potential challenges to, these interests.

Australia's involvement in the IPY clearly addresses government goals, yet there is little specific additional funding from government for this, but rather an 'alignment of resources with IPY projects' and directing existing 'resources to work well with IPY projects'. Australian scientists and educators are involved in more than 60 IPY projects and play a lead role in more than ten projects. The major Australian effort is a major marine science research program, the Census of Antarctic Marine Life (CAML) coordinated by Australia. CAML will involve major research cruises during the IPY and involves international collaboration. Other project include climate research, astronomy, impact of alien species, human biology and medicine, and the International Antarctic Institute – the latter consortium of universities involved in Antarctic education, with its initial secretariat base at the University of Tasmania.

The Australian Defence Force, the Antarctic and Southern Ocean

While the *Antarctic Treaty* demilitarises the Antarctic Treaty Area (the continent and the marine area south of 60° South), the Australian Defence Force (ADF) has had a longstanding connection with, and integral involvement in, Australia's Antarctic and Southern Ocean endeavours.²⁸ RAN capabilities were vital to the creation of the Australian National Antarctic Research Expedition's (ANARE) scientific research stations on Heard and Macquarie Islands in the late 1940s. The RAN conducted

annual re-supply of the stations for several years and undertook four emergency medical evacuations between 1950 and 1979. More recently, the RAN has operated deep into the Southern Ocean, firstly to meet Australia's international search and rescue obligations, and secondly, in fisheries protection operations around Heard and MacDonald Islands (HIMI). In the 1990s, the ADF conducted two well-publicised rescues of stranded yachtsmen deep in the Southern Ocean involving operations that had close cooperation between the RAN and the Royal Australian Air Force (RAAF).²⁹

The RAAF has a history of involvement in the Antarctic and sub-Antarctic area going back more than 75 years. When Sir Douglas Mawson led a scientific expedition to the southern continent in 1929-30, and again in 1930-31, he took with him a Moth floatplane and two RAAF pilots to assist in exploration. In December 1935 another air force party, comprising two pilots and four airmen, was shipped south, this time with two RAAF aircraft on board, on an eight-week mission to locate an American explorer and his pilot who had gone missing while attempting to fly across the icy continent.

When Australian scientists returned to Antarctica after WWII, the RAAF was again called upon to assist. In March 1947 a Lincoln bomber was employed on a meteorological and photographic sortie to Macquarie Island; the 4,000-kilometre round trip from the RAAF base at Sale, Victoria, lasted more than 14 hours. Two floatplanes and crews also went with the ANARE that year, undertaking survey, photographic and reconnaissance tasks at Heard and Macquarie Islands and along the Antarctic coast. The support that the air party was able to give to ANARE was curtailed in January 1948 after a gale destroyed one of the aircraft at Heard Island.

In 1955 the RAAF formed a special Antarctic Flight, consisting of two Auster Mk 6 aircraft and personnel, to meet ANARE's needs for dedicated air support at the major research station established at Mawson. Initially the Flight was maintained full-time on the ice, with the men staying until relieved by replacement crews arriving on annual ANARE re-supply vessels. This practice ceased in 1960 after a Dakota was lost to cyclonic winds, and during 1962 and 1963, the ANARE re-supply vessels brought with them two RAAF Beaver floatplanes for short-term operations.

In addition to activities of the Flight, other RAAF aircraft periodically became involved in providing support for the Australian presence in Antarctica. Early in 1951 another Lincoln mission was undertaken from Sale to Macquarie Island, to drop medical and food supplies to scientific staff isolated for eighteen months. Later re-supply missions to Macquarie Island were carried out by Hercules transport aircraft, these continuing into the mid-1980s. Australian and New Zealand scientists based at McMurdo Sound were similarly supplied by Hercules for about five years from 1978.

There have been numerous occasions where the RAAF has been called upon to despatch aircraft to the area for humanitarian reasons. In early 1997 a series of rescue missions were carried out by P3-C maritime patrol aircraft to locate stricken yachstmen in the Southern Ocean some 1300 nautical miles south-west of Perth,

with the RAN effecting the rescue. A similar mission was launched in late 2001 to drop urgently needed medical supplies to a sick crewman aboard a racing yacht located 1500 nautical miles south-west of Perth.

The Army's involvement in Antarctica spanned 46 years. In the summer of 1948 the Royal Australian Army Service Corps (RAASC) helped to establish our base on Macquarie Island. As the RAN's vessels were judged unable to approach the beach, the RAASC's amphibious DUKW vehicles became a logistical necessity in support of ANARE. Although the DUKW had seen regular service during WWII, 1948 was its first test in the climate of Antarctica and in the spartan environment, the additional advantage of DUKWs was their ability of transport ship-to-shore without a receiving terminal.

RAASC ANARE Detachments – and their continuation under the Royal Australian Corps of Transport (RACT) – generally consisted of two officers, two non-commissioned officers and two Royal Australian Electrical and Mechanical Engineers (RAEME) mechanics. The expeditions of 1970-71 saw a change to this with the testing of and transition to Lighter Amphibious Resupply Cargo (LARC) vehicles and the addition of 3 operators. Successful operations with LARCs saw the DUKW superseded. Particularly in the early years, appointment to Antarctic missions were in some demand among Army personnel, attracted by the sense of adventure and the accompanying unique training opportunities.

The first role of Army personnel was to operate the amphibious vehicles but they were also involved in maintenance and construction on Australia's bases. Furthermore, the RACT organised air dispatches, mostly to Macquarie Island but including a summer stay at Casey Station by troops from the 30 Terminal Squadron. The longest Army mission occurred unintentionally in 1987-88, when the Army ANARE Detachment that had been working on Heard Island were left stranded by the loss of a supply ship. It was six months before a ship came to relieve them, in what was the most extreme example of the weather conditions that affected Army operations.

With the exceptions of 1952 and 1953, every year until 1994 the RAASC/RACT provided logistics and manpower to ANARE. The termination of the relationship was the result of commercial considerations, since RACT had begun to charge ANARE for its services as a way to offset costs. In 1994 ANARE accepted a more competitive bid from a private contractor, putting to an end official Army missions to Antarctica. Continuing ad hoc involvement occurs through Army psychologists assisting in ANARE recruit selections and debriefings, as well as the occasional unofficial presence of Army personnel in private expeditions.

Strategic Interests

Australia's Antarctic and sub-Antarctic territories have strategic importance, not only in traditional security discourse but also increasingly raising non-traditional threats in relation to environmental security, including climate change. While it has been in Australia's direct interests to see Antarctica demilitarised and a nuclear

free-zone, this raises a question over maintaining these interests in a future in which the *Antarctic Treaty* breaks down, or its fundamentals are attacked, for example by actions of a non party or by non state actors. While such scenarios are unlikely they are plausible, particularly in a future where resources of the Southern Ocean and Antarctica may become more attractive due to scarcity or competition in other areas of the world.³⁰

The *Antarctic Treaty* has benefited Australia by maintaining Antarctica free of international discord. Almost no attention has been given to Antarctica in successive government strategic policy papers (see Table 1).

1986 Review of Australia's Defence Capabilities (Dibb Review) 1987 Defence White Paper	 Territorial claims in Antarctica cannot be defended effectively. Advocates international cooperation and non-militarisation of Antarctica. Supports non-militarisation; aims to keep Antarctica free from political and strategic competition. Perceives no requirement for defence activities in Antarctica beyond logistical support to scientific and other projects.
1990 Australia's Strategic Policy	No reference.
1993 Defence Strategic Review	No reference.
1994 Defence White Paper	No reference.
1997 DFAT White Paper	No reference.
1997 Australia's Strategic Policy	No reference.
2000 Defence White Paper	No reference.
2003 Defence Update	No reference.
2004 DFAT White Paper	No reference
2005 Defence Update	(comment on sub-Antarctic fish resources). No reference.
2007 Defence Update	 Operation RESOLUTE which protects Australian fisheries includes the Southern Ocean. Southern waters down to Antarctica part of area of paramount defence interest

Table 1: References to Antarctica in Australian Strategic Policy Documents

The rise of non-traditional security threats is a feature of the 21st century. Threats to environmental security, driven by competition for resources, scarcity and impacts of climate change are likely to become a major policy driver for governments.

While Antarctica and the Southern Ocean have successfully avoided conflict in the traditional sense, challenges are present in relation to environment security. These issues, and Australia's interests, should be considered in the proposed new Defence White Paper.

Fisheries

Australia's Southern Ocean fishery off HIMI and Macquarie Island is a significant stage in the evolution of Australian industry moving from inshore to a distant water capability. Principal target species are Patagonian toothfish (*Dissostichus eleginoides*), Antarctic tooth fish (*Dissostichus mawsoni*), and mackerel icefish (*Champsocephalus gunnari*). Patagonian and Antarctic toothfish are high value fish, with ready markets in the United States and Japan. Toothfish may grow to two metres in length and weigh 100 kilograms. Australian industry operating in the HIMI and Macquarie Island fisheries has faced significant challenges in developing capacity, developing markets and defending their interests.³¹ The development of the HIMI fisheries have also provided major challenges for the Australian Government and has been the single most significant driver in returning attention to the Southern Ocean.

The development of fisheries in the Southern Ocean in general, and off HIMI and Macquarie Island in particular, indicates the broadening of Australia's security agenda. The rise of IUU fishing led to Australian enforcement activity beginning in 1997-98, and searches for ways to reduce the level and rate of IUU catch through effective management under CCAMLR. Australia's commitment to combating IUU fishing through on the water monitoring, control and surveillance operations is also a good example of the intersection between environmental and more traditional elements of the security agenda.

Management of HIMI fisheries involves a number of Australian Government departments working closely together including the Department of Agriculture Fisheries and Forestry, Australian Fisheries Management Authority (AFMA), the AAD and Department of the Environment, Water, Heritage and the Arts as well as the Australian Customs Service and, as required, the Department of Defence. These agencies also operate within the international framework set by CCAMLR Conservation Measures, as the HIMI Australian fishing zone falls with the area under the jurisdiction of CCAMLR. The AAD has responsibility for administration of the Antarctic Marine Living Resources Conservation Act 1981 giving domestic effect to CCAMLR measures. Management arrangements for Australian fisheries in the Southern Oceans are, however, undertaken by AFMA under the Fisheries Management Act 1991, as amended. Whist this arrangement has led to some problems in balancing environmental protection with fisheries development objectives, Australia has set stronger regulations for fishing gear on domestic licensed vessels than that permitted by CCAMLR. Australia's increasing actions over fisheries in the Southern Ocean have led to some concern from the European Union that (in the words of a senior EC official) it, along with other coastal states, was trying to 'ringfence the fishery'.32

The IUU Problem and Fisheries Enforcement

IUU fishing has come to represent a formidable political challenge for national governments, international organisations and non-government groups. Australia, as a coastal state with small (but growing) distant water operations under strong national control providing sophisticated fisheries management systems, has defined and definite interests in ensuring appropriate oceans governance. For these reasons Australia while a minor 'player' in world fisheries has been able to play a constructive brokerage role in international fisheries diplomacy.³³ This role is also reinforced by Australia's strong commitments to maintaining or developing regional and bilateral arrangements.

Concern over the level and scope of IUU fishing in the Southern Ocean led to Australian enforcement activity that saw vessels arrested in 1997-98, 2001, 2002, 2004 and 2005. HMAS *Anzac* arrested two vessels for illegal fishing within the Australian HIMI EEZ on 21 October 1997. These vessels were escorted to Fremantle, Western Australia. A second frigate, HMAS *Newcastle* undertook an arrest of a third vessel in on 21 February 1998.³⁴ Ongoing surveillance activity using RAN vessels saw the arrest of Russian flagged vessels *Volga* and *Lena* by HMAS *Canberra* supported by HMAS *Westralia* on 7-8 February 2002.³⁵ HMAS *Warramunga* apprehended the Uruguayan flagged vessel the *Maya V* on 23 January 2004.

In addition to these RAN actions, Australia has undertaken regular civilian patrols of the HIMI EEZ, most recently with the chartering and commissioning of the *Oceanic Viking* for year-round patrolling in the Southern Ocean. Previous surveillance programs by the civilian patrol vessel *Southern Supporter* included the hot pursuit (6100km in duration) of the Togo flagged *South Tomi* in March-April 2001, finally apprehended following support from South Africa. In August-September 2003 a further pursuit (7000km) took place prior to the apprehension of the Uruguay flagged vessel *Viarsa*, again with support from South Africa and the United Kingdom. These hot pursuits occurred after these vessels suspected of illegal fishing within the HIMI EEZ in contravention of Australian law tried to evade arrest. Both pursuits were lengthy, and in the case of the *Viarsa* undertaken in extreme conditions.

Southern Ocean fisheries monitoring, control and surveillance is managed under the Southern Ocean Maritime Patrol and Response Program (SOMPR).³⁶ This program is managed by the Australian Customs Service and funds a dedicated armed patrol vessel, the *Oceanic Viking*. The *Oceanic Viking* apprehended the Cambodian registered *Taruman* in September 2005 for allegedly fishing within the Macquarie Island EEZ, with the master found guilty of offences under the *Fisheries Management Act*, leading to forfeit of catch and vessel. In the summer of 2007-08 the *Oceanic Viking* was deployed to monitor and observe Japanese whaling activities in the Southern Ocean.

The signing of a joint Australia–France cooperative enforcement treaty on 8 January 2007 has enhanced surveillance efforts in and around the HIMI territory and the French Kergulen Islands. This treaty, the *Agreement on Cooperative Enforcement*

of fisheries Laws between the Government of Australia and the Government of the French Republic in the Maritime Areas Adjacent to the French Southern and Antarctic Territories, Heard Island and McDonald Islands, builds on an existing treaty (signed in 2003) that provides the basis for cooperative surveillance and scientific research. In addition to surveillance, environment security also remains important. The protection of the Antarctic environment has led to the establishment of quarantine protocols affecting movement of people and goods (including food) to and from Antarctic and the sub-Antarctic Islands.

Whaling

Other challenges relate to the management of marine living resources within the Southern Ocean. There are significant differences over whaling amongst states and while discussion on whaling is quarantined within the International Whaling Commission, it is likely that this issue will continue to have impact within the ATS.³⁷ The declaration of an EEZ off the Australian Antarctic Territory in 1994 meant that this area was automatically declared a whale sanctuary when the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) came into effect. Given the provisions of the Antarctic Treaty, and particularly interpretations given to Article IV by some states, discussed above, Australia applies Australian law only to Australian citizens and chooses not to apply its law to other states. This position has been challenged by non-governmental organisations (NGOs) over Japanese scientific research involving the lethal take of whales that occurs within the waters off the AAT. These challenges have involved Greenpeace and Sea Shepherd vessels attempting to disrupt whale harvesting. The Sea Shepherd vessel Farley Mowat was involved in a collision with the Japanese whaling supply vessel Oriental Bluebird in January 2006 and in January 2008 two members of the Sea Shepherd vessel Steve Irwin boarded a Japanese whaler (the Yushin Maru No 2) and were detained on the vessel. The two Sea Shepherd activists, an Australian and a British citizen, were later returned to the Australian Customs Service vessel Oceanic Viking and then transferred back to the Steve Irwin.

In 2004 Humane Society International (HSI) took action in the Federal Court of Australia against the Japanese whaling company (Kyodo Senpaku Kaisha Ltd) arguing that their action breached provisions of the EPBC Act.³⁸ Justice Allsop invited the Commonwealth Attorney-General to intervene in the proceedings. This resulted in a submission that noted that the Court should not allow the case to proceed as it would give rise to a dispute with Japan that would be contrary to Australia's interests. Justice Allsop declined to grant leave to HSI, noting the matters raised by the Attorney-General.³⁹ HSI appealed the decision and in 2006 the Full Bench of the Federal Court of Australia decided by a two to one majority in favour of HSI. After the appeal the case returned to Justice Allsop, who granted the HSI's application to serve the action on Kyodo Senpaku Kaisha Ltd. Following a direction hearing in July 2007, at which the Japanese company did not appear, the matter was listed for trial, and heard in September 2007. The Attorney-General reiterated his position of

opposing the action. In January 2008 the decision in the case was released, with the Court granting the injunction sought by ${\rm HSI}^{40}$

The defeat of the Howard Government in the Federal election on 24 November 2007 changed the dynamics of the whaling issue. The Australian Labor Party (ALP) in opposition had argued that it would pursue all avenues to stop Japanese whaling. The Japanese Government announced that it would not target humpback whales as originally planned but reiterated its position that it did not recognise Australian maritime jurisdiction in waters off the AAT. In addition to diplomatic contact and meetings the new Rudd Government dispatched *Oceanic Viking* to the Southern Ocean to monitor Japanese whaling and collect evidence in January–February 2008. As noted above the *Oceanic Viking* was used to transfer Sea Shepherd protestors from the Japanese vessel *Yushin Maru* No 2 back to the *Steve Irwin*.

Tourism and Human Impacts

Management of human impacts will continue to be a challenge for all Treaty Parties, including Australia. Antarctic tourism is expanding, with increased visitor numbers impacting on a small number of sites (mostly in the Antarctic Peninsula, south of South America). Antarctic tourism is regulated under the ATS, but also relies heavily on national controls by Treaty Parties and self-management by tour operators through the International Association of Antarctica Tour Operators (IAATO).⁴¹ Antarctic tourism operations are segmented; ship-borne visits are the major component, with smaller numbers of airborne tourists landing on the continent. While there are limited ship-borne tourist operations landing tourists within the AAT, the sub-Antarctic Macquarie Island is a stopping-off point for such cruises, with limits on landings and numbers of people.⁴² Tourist flights from Australia to Antarctica are popular, with an Australian travel company chartering a Boeing 747 400 to over-fly the AAT in the summer season. The numbers of these types of tourists are counted in annual IAATO statistics on tourism and the popularity of such flights reinforces the public interest in Antarctica.

Increasing interest in 'adventure tourism' and small expedition-style activities have led to concerns from Treaty Parties related to search and rescue, and repatriation of individuals following accidents. The grounding of the MS *Nordkapp* off Deception Island in January 2007, and sinking of the MS *Explorer*, with passengers and crew forced to abandon ship, in November 2007, indicates the inherent risks with ship-borne tourism. While these incidents occurred off the Antarctic Peninsula in West Antarctica, close to other ships and shore-based SAR capability they are reminders of the challenges to ship-borne operations in the Antarctic. Tourism to East Antarctica (the area of the AAT) is inherently more risky due to the area's remoteness, concomitant reduced volume of shipping and limited shore-based infrastructure.⁴³ Any incident in this region would stretch Australian search and rescue capability to its limits.

The Treaty Parties, with Australia an active player, have been active through inter-sessional contact group discussions, a meeting of experts sponsored by Norway,

and discussion and exchange of information at ATCMs. Australia managers have a close relationship with Australian-based tourism operators, which are required to submit environmental evaluations for their activities. It has also played an active and important facilitating role in helping to design site-specific guidelines for Antarctic Peninsula visitation and has tabled an innovative approach to operator accreditation, which the Parties and IAATO are working with. Australia is represented at IAATO annual meetings and the Tasmanian State Government is an associate member of IAATO, maintaining a close interest in East Antarctic tourism matters.

Global Climate Change, the Antarctic and Southern Ocean⁴⁴

Antarctica, the Southern Ocean, and the atmosphere above, are key components of the global climate system. The continent contains 70 per cent of the world's freshwater, enough to raise sea-level by around 60 metres if the Antarctic ice sheets collapse. The annual freezing of the sea-ice more than doubles the ice-covered area. Sea-ice both insulates the relatively warm ocean waters from the cold air and reflects solar radiation to space. It is therefore of major importance in the global energy balance. Meanwhile, the freeze-thaw sea-ice cycle generates deep currents of cold salty water that drive global ocean circulation.

The sea-ice supports a productive but highly specialised marine ecosystem. The Southern Ocean also is a major sink of CO_2 from the atmosphere. Increased CO_2 uptake in the ocean triggers chemical reactions that can make the ocean more acidic and affect the ability of some organisms, particularly phytoplankton – that is fundamental to the Southern Ocean's ecosystem – to form shells. It can also change the chemistry of dissolved nutrients, potentially causing large-scale marine ecosystem changes. The term 'ocean acidification' refers to the fact that this added carbon dioxide forms a weak acid (carbonic acid) in water, changing the oceanic carbonate chemistry and making the ocean more acidic. These changes have impacts on the ocean, its marine ecosystems and the human communities that depend on them economically and as a significant food resource.

So far, with the exception of the Antarctic Peninsula, warming in Antarctica has been less dramatic than elsewhere, even ambiguous. But the recent warming period is also marked by changes in the atmospheric circulation around Antarctica. The strong westerly winds that ring the Southern Ocean have contracted toward Antarctica. This may be the result of increased ${\rm CO_2}$ and the influence of ozone depletion. The southward movement of the westerlies has been linked to reduced winter rainfall in southern Australia.

Thus what happens in the Antarctic has far-reaching consequences; and yet we know less about this than any other region on the planet. High quality climate studies started in 1957-58, but only gave data from a few sites. Well spread satellite data cover even less time. The ice sheet provides data on past climate – for example, bubbles of gas trapped in ice reveal the extent to which human emissions have elevated greenhouse gas concentrations above natural levels. A major unanswered question is the stability of the ice sheet itself. The 2007 International Panel on

Climate Change (IPCC) *Fourth Assessment Report* acknowledges the potential for accelerating ice discharge by processes that are poorly understood.

The potential for surprises in sea-level rise predictions is significant. While the bulk of the East Antarctic ice sheet is likely cold enough to remain frozen for millennia, the impact of warming at the margins and the potential acceleration of ice discharge are important to study if sea-level change is to be predicted with confidence. Much of the smaller West Antarctic ice sheet, which is already losing mass, could be vulnerable to relatively rapid collapse and release up to 6 metres of sea-level equivalent over centuries. Also important is the accumulation of snow to the continent, which may counter sea-level rise as increased snow input to Antarctica is generally predicted, although yet to be seen.

It is clear that there is still much uncertainty surrounding the individual contributions to observed sea-level rise. In particular, the sign of the Antarctic contribution is not even known with any confidence, reflecting large uncertainties concerning the Antarctic mass balance, both now and in the future (when East Antarctica could well gain mass in a warmer climate). Australian research includes glacier modelling, ice sheet remote sensing, ice drilling and oceanography in the regions of ice discharge. Instruments are recording atmospheric temperatures, composition and circulation. The sea-ice is being monitored for signs of change in extent and thickness, and physical processes are being studied, together with ecosystem connections, so that future climate impacts might be better anticipated.

Conclusion

The 2007-09 IPY, focusing on large, collaborative science in what is, despite technological advances, an extreme, remote and hostile environment, reinforces many of the key values contained within the Antarctic Treaty System. Australia, through its active participation in the IPY will continue to contribute to Antarctic science, one of its ongoing policy interests in Antarctic and the Southern Ocean.

Australia's Antarctic and sub-Antarctic territories have strategic importance, not only in traditional security discourse but also increasingly raising non-traditional threats in relation to environmental security, including climate change. In the case of the latter, the Antarctic is of global, not just national significance. Climate change poses a range of challenges that are likely to directly affect operations of the ADF in general and the RAN in particular. The RAN role in broader 'aid to the civil power' and maritime constabulary roles are likely to increase as its assets and capabilities are required in response to extreme events. In the Pacific, such events have direct humanitarian impacts with the RAN likely to be called in to provide immediate assistance.

Climate change, particularly rise in ocean temperature is likely to lead to increased climate variability, where more frequent 'extreme events' such as cyclones and storms are likely to directly impact on coastal areas. Concomitant changes in oceans chemistry have longer terms but likely irreversible impacts. These changes will affect Australia and impacts on its interests. Ecosystem change, too, will have

impacts and may mean that resources of the Southern Ocean and Antarctica may become more attractive due to scarcity or competition in other areas of the world.

This raises a question over maintaining Australia interests in Antarctica and the Southern Ocean into the future. It is highly likely that the Antarctic Treaty System will retain its robustness and move into its second half-century continuing to provide a platform for the continued exposition of the core values of peace and science. The counterfactual case, when these fundamentals are attacked, for example by actions of a non-party or by non-state actors will have serious consequences.

Border Protection Command

Iames Goldrick

The question that I am here to answer is the simple one – what is Border Protection Command? It is an inter-agency organisation, established in March 2005 as one of the Government's responses to the 2004 Task Force on Offshore Maritime Security. Originally called the Joint Offshore Protection Command, in October 2006 it was redesignated the Border Protection Command.

It is led by the Australian Customs Service and the Department of Defence, but includes permanent staff from the Australian Fisheries Management Authority and the Australian Quarantine and Inspection Service. Its mission is to coordinate and control whole-of-government efforts to protect Australia's national interests against security threats in the offshore maritime domain.

Let me draw your attention to key words in that description. First, our remit is offshore – fundamentally Australia's maritime zones to seaward of the territorial sea baseline. But we have obvious interests outside our maritime zones and a requirement to coordinate our efforts with the security of ports and infrastructure and other onshore elements, including, for example, state and territory police authorities. Secondly, in terms of security threats, our remit is for non-state based threats.

There are other key words. Coordinate and control are two. Customs and Defence provide surveillance and response assets for Border Protection Command to control, while we also work to ensure that operational responses are effectively coordinated between all the agencies with responsibilities for the maritime domain. I should note that my responsibilities do not include search and rescue. Some countries have gone down the path of combining the civil maritime security effort with that of search and rescue; Australia has not. But we have an excellent and seamless relationship with the Australian Maritime Safety Authority (AMSA). This works two ways – Border Protection Command frequently not only reports sightings and incidents to AMSA but also assigns assets at AMSA's request to participate in search and rescue, while Border Protection Command, subject to AMSA priorities, makes use of their Dornier aircraft around the coast to supplement our aerial surveillance.

And here I need to make a reminder about the nature of the Australian condition. It is best summed up by Geoffrey Blainey's phrase 'The Tyranny of Distance', illustrated by Figure 1 which is an overlay of Western Europe on the Australian land mass. Australia has unique problems and may thus require some unique solutions to its maritime security. And if that chart makes you think, reflect on the distances involved in this one. There is also, however, the 'Tyranny of Proximity' in the Torres Strait (Figure 2). The northern Australian islands in the strait are only a few thousand metres from the mainland of Papua New Guinea. Things can and do happen very fast in that part of the world.

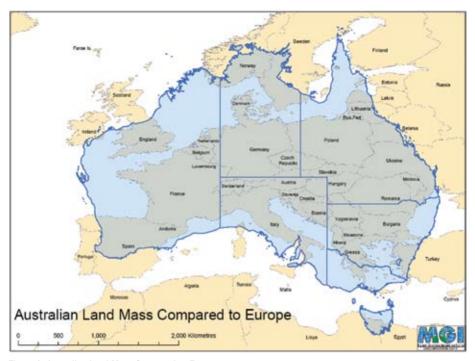


Figure 1: Australian Land Mass Compared to Europe

The Australian Government has determined that there are eight basic categories of maritime security threats. The illegal exploitation of natural resources, as manifested in illegal fishing, has been one of our main areas of concern in recent years and much effort has been devoted to dealing with that problem. But we need watch and be prepared to either deal with or support the responsible agency across a range of other threats – illegal activity in protected areas, prohibited imports and exports, bio-security and marine pollution, piracy – in its general sense of armed robbery at sea – maritime terrorism and, another key priority of Government, the prevention of unauthorised maritime arrivals. Developing our maritime capacity to meet the threat of terrorism was one of the key reasons for the establishment of the Command and we are looking to achieve progressive improvement here.

Customs and Defence are the lead agencies in the Command and, as such, I operate under a joint directive from the Chief Executive Officer of Customs and the Chief of Defence Force. I have both civil and military elements working for me – in Customs, I have both an operations organisation, which is based on the National Surveillance Centre in Canberra, and a capability management and development function. On the military side, I am Commander Joint Task Force 639 (CJTF 639), which is Defence's standing contribution to civil maritime surveillance and response in the form of Operation RESOLUTE. My military deputy and tactical commander for the Defence assets is the Commander Northern Command in Darwin.



Figure 2: Proximity in the Torres Strait

But Border Protection Command is not self-tasking. In a sense, Customs and Defence are my providers, while all the agencies with responsibilities for maritime security are my clients in relation to their requirement for surveillance and response. Government coordinates an inter-agency approach to maritime security policy through the Strategic Maritime Management Committee (SMMC), chaired by a Deputy Secretary of the Department of Prime Minister and Cabinet. This committee reports to the National Security Committee of Cabinet through the Secretaries Committee for National Security. I chair the Joint Agencies Maritime Advisory Group (JAMAG) and this is very much the engine room of both policy development and coordination of requirements for surveillance and response.

In turn, the JAMAG has a number of permanent working groups. They are doing good work. Let me draw attention to one in particular – the Planning Advisory Working Group. This is the mechanism by which the various agencies conduct a risk assessment process to determine the priorities for surveillance and response in Australia's maritime zones. This is done through each agency concerned allocating a risk score for each month to each of the various areas and sub-areas into which our maritime zones have been divided. This is done three months ahead, revised every month and can be amended depending upon circumstances at any time. Fundamentally, and logically, the priority of effort is allocated to the areas of highest risk.

We can look at Border Protection Command's tasks as falling into three functional areas: awareness, prevention and detection, response and recovery.

We maintain awareness of activities in the offshore maritime domain with the intent of identifying security threats, assessing their likelihood and estimating their potential consequences. We cannot do that without creating a condition in which we have the best possible idea of just what is going on around us. One of the key

mechanisms by which we propose to do this and on which considerable development work has already been undertaken is the Australian Maritime Identification System (AMIS).

Creation of this system was one of the key recommendations of the 2004 maritime security task force. Its basic intent is to bring together all the data available to government in relation to shipping and vessel movement in a way that not only presents an effective picture of what is going on, but also allows effective threat assessment. AMIS is not in itself a sensor system, but will use both Defence sensor and surveillance systems, civil government sensor and surveillance systems, including the vessel tracking systems which are becoming increasingly standard. What it will also do is allow analysts to access other information – ship identity, cargo, crew, history, ownership, characteristics and so on. It will be very much more than tracks on a map.

AMIS will operate a graduated information system for vessels coming to Australia – with the basic intent of being able to identify all vessels within our exclusive economic zone (EEZ) other than day recreational craft. This is an ambitious goal, but it is one that we believe is a worthwhile target.

We also believe that a fully operational AMIS will provide an important value adder to our surveillance efforts because it will guide our planning and also, with the proper two way feeds to units at sea and in the air, allow them to target their tactical efforts much more effectively. A proof of concept was developed in 2007 and full implementation is now under way, with the first stage intended for operation by the end of 2008.

Prevention is our second function. Perhaps the most important contribution that Border Protection Command can make in its own right is the maintenance of a surveillance and response regime which is so effective that it constitutes a deterrent in itself. This is certainly one of our aims with our current campaign to eradicate illegal fishing.

But, in many ways, Border Protection Command can deal only with symptoms and not underlying causes. This is why we support whole of government efforts to prevent or disrupt security threats before they manifest themselves in our maritime zones. There has been, for example, a great deal of extremely hard and effective work done by a number of Australian government agencies in concert with the Indonesian Government to support the resolution of Indonesia's own significant illegal fishing problems and to educate Indonesian fishermen as to the nature of the Australian maritime zones and the consequences of breaching Australian law. This sort of cooperation holds potential to reduce the pressures on Australia's domains and thus the pressures on our assets.

Our most obvious areas of activity in Border Protection Command are of detection, response and recovery. Let me talk about the assets that are available to me. First, in terms of surveillance, in addition to various Defence systems, we have access to commercial satellite imagery. For example, we have arrangements

by which we access French satellite data to provide a regular picture of activity in Heard and Macdonald Islands.

I currently have some 11 fixed and two rotary wing aircraft under the Coastwatch program. These are commercially provided aircraft and we have, under the name of Project SENTINEL, transitioned from a mixed fleet of fixed wing aircraft to one of ten Dash 8 long range surveillance aircraft. The new fixed wing contract started at the beginning of January 2008. Our new rotary wing contract, with one new and one modernised helicopter for the Torres Strait, began on 1 July 2007. In addition, we have recently introduced a third helicopter as a rapid response unit in the Northern Territory.

As CJTF 639, I am allocated P-3C maritime patrol aircraft support, while Border Protection Command also makes use of the five AMSA Dornier aircraft coming into service around the coast. In addition, I make use of patrols by the Army's Regional Force Surveillance Units in Northern Australia.

In terms of response assets, there is a similar mix of civil and military. I have the major call on the services of the eight 38 metre Bay class Customs patrol boats, together with the northern response vessel, the 98 metre trimaran *Triton*. In southern waters, but also deployed on occasion to support the response effort in the north, is the chartered *Oceanic Viking* – currently monitoring whaling operations in the Southern Ocean.

As CJTF 639, I am allocated a number of patrol boats and other Royal Australian Navy (RAN) minor war vessels for my operational control. In addition, I can generally call on the services of a major fleet unit and have other Defence assets at agreed notices to move for specific contingencies. One of the greatest advantages of the Border Protection Command model is this ability to call on additional assets, particularly from Defence, and to return them when their task is completed. During the temporary operational withdrawal of the *Armidale* patrol boats in 2007, for example, not only were the deployments of the Customs vessels adjusted to ensure that all threats were covered, but the RAN quickly provided additional units, such as another *Huon* class coastal minehunter, as substitutes.

The point to note is, although the ships do move and quite fast at that, the distances are such that the aerial support is generally vital in directing the patrol boats onto the illegal fishing vessels.

This brings me to an important point. I mentioned earlier that Australia has some unique challenges. In determining the appropriate technology, it is always important to understand the primary target set. Systems, particularly ones originally developed for military requirements, which are extremely effective against large metal targets which may themselves be radiating, may not be so good against small wooden craft – nor, even if they achieve detection, in giving the type of information that is wanted. How many people are onboard? Are there any animals – is the contact a quarantine risk – and so on.

And, while my focus has so far been on our northern waters, there is very much a southern dimension. I have already mentioned our cooperation with France.

But we have our own frequent and significant presence in the form of the patrol vessel *Oceanic Viking*. This ship has not only been a key factor in preventing illegal intrusions into our own EEZ around Heard and Macdonald Islands, she has also made an important contribution to the work of the *Convention for the Conservation of Antarctic Marine Living Resources* and the efforts to prevent unregulated and unsustainable fishing in the region.

If flexibility has been an underlying theme so far, this is no accident. From the patrols which we conduct to protect the oil and gas infrastructure in the north-west to the prevention of people smuggling, there is the need to be able to respond quickly to meet short notice threats.

Let me close by talking about the future. The eight threats to maritime security will continue to require unremitting effort to contain. Within Border Protection Command we are working to develop our future operating concepts in order to understand not only how those threats are likely to develop, but how our civil maritime security capabilities should evolve to meet them in the most effective way. The key to success in this endeavour will be in creating a framework that matches technologies to task and makes the most of both military and civil assets - avoiding duplication but also ensuring that a degree of flexibility is 'built in'. To that end, we are working to improve our understanding of emergent technologies, such as remote sensors and Unmanned Aerial Vehicles (UAVs), and where they can best fit with a surveillance and response matrix. We have already been involved in UAV trials, such as that of the Mariner Demonstrator on the North-west Shelf in concert with Defence, and are planning to trial a mid-range UAV before the end of 2008. But I should emphasise that we are not ourselves an experimental or development organisation and our approach must be one which seeks to maximise effect and minimise risk.

Above all, Border Protection Command is about providing a service – surveillance and response to protect Australia's maritime domains – and providing that service every day of the year.

Protecting Australia's Maritime Zones and Offshore Interests: The Importance of Hydrographic Surveying and Charting

Rod Nairn

In 1960, US President John F Kennedy said 'knowledge of the oceans is no longer a matter of curiosity; our very survival may hinge on it.' Looking back from where we now stand it is clear that, President Kennedy was absolutely correct.

Ninety per cent of global trade goes by sea, most communications are still carried by undersea cables, a major part of the world's oil production comes from the sea and 60 per cent is transported by sea and knowledge of the oceans and environment have played a critical role in nearly all naval battles, and major wars since the beginning of recorded history.

Australia's national security policy clearly recognises this reality:

Oceans define Australia's geography and are critical to our security, with our dependence on maritime trade and the maintenance of freedom of movement for all commercial shipping. Oceans link us with our trading partners, provide resources and wealth and offer a defence against possible aggression.¹

The aim of this paper is to note the variety of threats in our maritime zones and provide a hydrographer's insight into Australia's national and international obligations therein. I will discuss some of the fundamentals of protection and highlight the essential enabling work undertaken by the Royal Australian Navy Hydrographic Service to support the national infrastructure and enable effective maritime operations.

Obviously, Australia is an island nation and this fact has had enduring influence in the history, settlement and development of the continent. The oceans and seas that surround this nation have provided Australians with sources of food and wealth, a means of communication and a significant degree of isolation and thus protection. The management and protection of Australia's maritime zones is of the utmost importance.

Australia's geographic circumstance is the fundamental reason that Australia has long been considered 'one of the most inherently secure nations on this planet.' However the strategic advantage offered by our geography does not protect Australia against rogue states armed with weapons of mass destruction and long range ballistic missiles. Nor does it protect Australia from the scourge of terrorism.' These matters have received much media and public attention especially in the wake of Australia's involvement in the global 'War on Terror' including deployment of military forces to Afghanistan and Iraq.

Terrorism, however, is only one of a number of diverse threat components that impact on Australia's maritime zones. Others include natural disaster such as tsunamis, marine accidents or navigational incidents, environmental pollution, illegal fishing, piracy and illegal migration.

The development of the *United Nations Convention on the Law of the Sea 1982* (LOSC) and other international conventions and protocols have provided both sovereign rights over various maritime zones and international obligations for their management, conservation and protection.

The *International Convention for the Safety of Life at Sea* (SOLAS) was first adopted in 1914 in response to the tragic loss of life in the RMS *Titanic* disaster, however the international law of the sea that governs the maritime region, has really only developed in the past 60 years. For centuries the oceans have been considered, in the words of Mahan, 'a great highway; or better, perhaps of a wide common, over which men may pass in all directions.' The end of World War II (WWII) saw a period of decolonisation that increased the number of independent states and marked the start of claims to continental shelf resources. The Truman Proclamation in 1945 defined the policy of the United States towards ownership of the sub-sea and seabed resources of the continental shelf and was the catalyst for a series of United Nations Conferences on Law of the Sea. Over the ensuing 50 years, these conferences continued and coastal states made claim to jurisdiction over ever wider ocean zones and seabed areas. This process culminated with the entry into force on 16 November 1994 of the LOSC, which has reduced the freedoms of the seas and reduced this 'wide common.'

The LOSC enshrines, in law, the right of coastal states to claim territorial seas of 12nm, a contiguous zone out to 24nm, an exclusive economic zone (EEZ) out to 200nm, and the possibility of an extended continental shelf to a maximum of 350nm. It also formally recognised the right of archipelagic states to apply restrictive laws similar to the rules governing territorial seas to their enclosed archipelagic seas. It enshrines the principles of freedom of navigation on the high seas, the rights of innocent passage through territorial waters, the prevention of piracy and the obligation on coastal states to provide hydrographic services to support safe navigation in their waters. These hydrographic obligations are further detailed in SOLAS, Chapter 5, whereby Contracting Governments undertake to arrange for the collection and compilation of hydrographic data and the publication, dissemination and keeping up to date of all nautical information necessary for safe navigation.

The International Maritime Organization (IMO) is the principle organ that regulates shipping, and the rights and obligations of coastal States, port states and flag states. For the provision of hydrographic services, the International Hydrographic Organization (IHO), currently with 80 member states, is the intergovernmental technical body that sets standards for charting, electronic charting and hydrographic surveying. The global nature of shipping makes it essential that the same standards and conventions are universally adopted in the provision of navigation information. The objects of the IHO are:

- the coordination of the activities of national hydrographic offices
- · the greatest possible uniformity in nautical charts and documents
- the adoption of reliable and efficient methods of carrying out and exploiting hydrographic surveys
- the development of the sciences in the field of hydrography and the techniques employed in descriptive oceanography.⁷

The IHO also encourages regional states to work in concert to improve the standard of hydrographic services in pursuance of economic benefits and improving safety at sea. This is done through a network of 15 regional hydrographic commissions, and Australia is a member or the South West Pacific Hydrographic Commission, currently chaired by France. Australia assumes a leadership role within the commission and represents the interests of the group at the IHO Capacity Building Committee and Strategic Planning Working Group.

But Australia's maritime zones themselves comprise a complicated legal framework that has developed because of Australia's federal system of government, differing threats, and the evolution of the LOSC. Under the *Offshore Constitutional Settlement 1980*, the States retain control over the first 3nm of the territorial sea and the responsibility for the security of ports and port approaches. Commonwealth jurisdiction over the remainder of the maritime zones involves 34 Commonwealth Acts and eight different Commonwealth departments. The one commonality that transcends this complicated web of legislation and regulation is the national responsibility of the RAN Hydrographic Service to produce the nautical charts that define the underlying spatial information used by all these agencies. In management parlance 'you can't manage something if you don't measure it' and in reference to the maritime zones, that measurement is provided by hydrographic surveying and charting.

I am often asked why the RAN is expending efforts on hydrographic surveying which is not directly related to the defence of Australia. To answer this I need to give you some background of the Australian Hydrographic Service (AHS). The AHS is a component of the Hydrographic Meteorological and Oceanographic Force Element Group (HMFEG), and has evolved from the early exploration of the Australian continent by the Royal Navy. After James Cook first charted the east coast of Australia, a number of exploration voyages by other Royal Navy navigators and hydrographers, notably Flinders, King and Stokes were made so that by the mid-1800s, the shape of the continent was known and there was some knowledge of its coastal waters.

Even after Australian Federation in 1901, the British Admiralty maintained responsibility of surveying and charting Australian waters, but after World War I their services were withdrawn. This presented a significant problem because at the time Australian waters were among the most poorly surveyed in the world and so on 1 October 1920 the RAN Hydrographic Service was established to carry out hydrographic surveys of Australia's waters.

However nautical chart production was still undertaken by the British Admiralty Hydrographical Office until WWII when the Australian Chart Depot commenced production of Australian charts.

Following the Truman Proclamation and the first conference on the law of the sea, the Australian Government realised their emerging responsibilities in Australia's hydrographic area and in 1946 the Australian Cabinet met and decided that it would be an RAN responsibility to meet Australia's national obligations for hydrographic services. The decision was reviewed during the Richardson review and reaffirmed by Cabinet in 1988. Thus the responsibility for hydrographic survey and charting ultimately rests with the Australian Chief of Navy.

RAN responsibilities include the publication and updating of Australia's official nautical charts, tide tables and other information required for the safety of ships navigating Australian waters; and this is a large responsibility as the Australian Charting Area is about one-eighth of the world's surface and includes 30,000 kilometres of coastline. Fortunately there is close alignment between naval operations and these national responsibilities, but much of the benefit is broader, contributing to the national infrastructure and what is known as a 'public good'.

Hydrographic knowledge is the fundamental building block on which all coastal maritime activities depend, including ensuring the safety of navigation, enabling exploration and exploitation of marine resources, determination of seaward limits of national jurisdiction and the delimitation of maritime boundaries, protection of the environment and modelling of the effects of the sea and maritime policy development.

This arrangement acknowledges the benefits of the RAN fulfilling both a national and a 'Defence' role. The most obvious benefits are the avoidance of duplication of effort, and the inherent advantages of the RAN being able to access all available data and assets in times of need. It provides the flexibility of the hydrographic survey ships being ready to be tasked for military purposes when required and to concurrently conduct training of military hydrographic specialists and other seagoing personnel whilst undertaking the national survey role.

Patently this arrangement provides the best value for money to the Australian taxpayer in meeting both the national hydrographic service obligations and providing direct hydrographic support to Defence.

The AHS delivers the national survey and charting function through a program known as Hydroscheme, which is three-year rolling program that is updated annually. It is a whole-of-government program, prepared through wide consultation with government and non-government customers and stakeholders including consideration by the planning advisory working group of the Joint Agencies Maritime Advisory Group (JAMAG). The completed scheme is approved by the Chief of Navy and forwarded through JAMAG to the Strategic Maritime Management Committee in the Department of Prime Minister and Cabinet, to provide for a whole-of-government visibility of this national program. Hydroscheme includes both the surveying and

chart production aspects of the hydrographic task. It is an unclassified document that is available on the AHS website <www.hydro.gov.au>.

Preparation of the Hydroscheme is in many respects a sensitive balancing act trying to massage the competing requirements of the numerous stakeholders and customers into a balanced whole-of-government focused effort. While hydrographic efforts in support of the national maritime trade would be focused on the areas of highest density shipping, or on the approaches to commercial ports and harbours, the defence and border protection interests are mainly in the northern Australian region were traffic densities are the lightest. The result is a program which sees all customers equally satisfied, or possibly equally unhappy. Fortunately the AHS has been well supported by the Department of Defence and the Australian Government over the last three years and as a result, I believe that our customers should be classed as equally satisfied – I am sure you will let me know if I am wrong.

To incorporate those activities of more sensitive nature, or with a purely Defence focus, such as meteorological and oceanographic support to operations, a military Hydroscheme document is also produced, which has a limited distribution within the Department of Defence.

Rear Admiral Goldrick spoke of his three functional areas in his Border Protection Command: awareness, prevention and detection, response and recovery. Clearly, hydrographic information is a vital enabler to at least two of these, specifically awareness, and response and recovery.

In relation to awareness, charting and hydrographic information provides the essential underpinning data for situational awareness upon which the layers of intelligence and surveillance information are built. It provides the spatial information necessary to display and position the threat in the real world context. Hydrographic information provides the base layer in the new Australian Maritime Indentification System (AMIS).

In the area of response and recovery, the nautical chart or electronic navigational chart (ENC) provides the essential navigational information to allow freedom of manoeuvre for patrol and enforcement vessels and to enable them to interdict and apprehend.

Until now I have spoken in general terms, so let me give you some specific examples of what the AHS is doing to support protection of our maritime zones.

One zone attracting particular publicity at the moment is Australia's proclaimed Southern Ocean Whale Sanctuary. Whilst this is not the forum to debate the validity of Australia's territorial claims in the Antarctic and the adjacent sea areas, it is germane that these Antarctic EEZ claims are dependent on Australia's nautical charts of Antarctica and the Southern Ocean and the bathymetric surveys that underpin them.

Australia is a signatory to the *Antarctic Treaty 1959* and supporting conventions and protocols. Whilst article IV of the *Antarctic Treaty* precludes signatories making new or enlarging existing territorial claims, it does not preclude claimants from exercising control over waters adjacent to pre-existing claims. ¹⁰

Though Australia therefore is not actively pursuing its claims in the Antarctic and is not yet enforcing it's national laws with respect to Southern Ocean whaling, the actions of the AHS in maintaining a continuing commitment to conducting hydrographic surveying and charting in the Antarctic region helps to maintain the validity of Australia's Antarctic territorial claims, which supports the broader national interest. Australia's obligation under SOLAS to provide 'accurate and up to date charts to enable the safe navigation of vessels' applies to all of Australia's maritime zones.

Another area attracting some international contention is the Torres Strait. In 2006 Australia and Papua New Guinea (PNG) were successful in lobbying the IMO for international recognition of a Particularly Sensitive Sea Area that encompasses the Torres Strait. Subsequently the Australian Maritime Safety Authority (AMSA) issued marine orders extending the area of compulsory pilotage that previously covered only the Great Barrier Reef to include the Torres Strait. The AHS is working with AMSA to further upgrade the navigational charts and aids, and providing real time tidal height and stream information in this dangerously shallow and sensitive area. Also this area is one of the few in Australia that required frequent re-survey due to the shifting nature of the seabed and the minimum under keel clearances of ships navigating there. The establishment of an under keel clearance modelling regime to replace the maximum static draught rule through Torres Strait is currently under discussion.

In 2005 following the introduction of the *International Ship and Port Facilities Security* (ISPS) *Code*, ¹² the AHS quickly produced new charts of our 70 commercial ports within 12 months to depict the port security zones. These charts were essential for awareness – to provide the mariner with the spatial information to comply with legislation, and also for response and enforcement – providing the evidence necessary to support prosecution.

More recently a new folio of boundary charts has been defined specifically for use in the patrol and enforcement of our northern maritime borders. Our northern boundary is a complicated combination of agreements and treaties - the ocean and seabed boundary differ with locality and these charts are necessary to clarify these international agreements in the spatial context. This new folio of charts will be provided in paper and electronic form within the next few months.

But surely the most important hydrographic contribution is that of improving navigational safety, reducing the risk of collision and grounding and thus significantly attenuating the threat that shipping poses to the maritime environment, fishing industry and offshore oil and gas installations.

Following notable groundings, such as the *Bunga Teratai Satu* and *Doric Chariot*, a study into shipping within the Great Barrier Reef found that of 33 serious collisions and groundings the majority were attributable to human error, particularly loss of situational awareness. One of the main recommendations of the study was to provide ENC coverage to support navigation with Electronic Chart Display and Information Systems (ECDIS).

The IMO has now authorised ECDIS as an alternative to the traditional nautical chart to improve maritime safety by reducing the possibility of human error. ECDIS combines satellite and other position fixing systems with ship's sensors and a sophisticated electronic database containing charting and other navigation information. The chart information in ECDIS is continuously analysed and compared with a ship's position, intended course and its manoeuvring characteristics to give warning of approaching dangers and planned course alterations. ¹³ ECDIS greatly enhances the safety of ship navigation, but it is dependent on the provision of ENC data.

The IMO has mandated the use of ECDIS by new build high speed craft from July 2008. In the same month, the IMO's Committee on Safety of Navigation will be meeting to again consider mandating carriage for other types of vessels. Australia has lobbied strongly for introductory of mandatory ECDIS in SOLAS-class vessels, though the IMO's decision is greatly dependent on the amount of coverage of ENC worldwide, but there are many gaps in the current level of ENC coverage of the globe. However, global ENC production is expanding exponentially, and by 2012 the majority of coastal states expect to have full ENC coverage

Australia commenced production of ENC in 1999. Coverage of the inner Great Barrier Reef area was completed by the end of 2004. However, the completion of ENC coverage for all Australian waters is a mammoth task; first due to the number of charts in the Australian catalogue, and second, due to the generally poor status of these legacy charts. Many Australian charts were inherited from the British Admiralty, and any low-use areas are still in imperial measurements and compiled on out of date or even unknown vertical and horizontal datums.

Of all the charting in the Australian region, until a few years ago the status of PNG charting was the most out of date. Through international engagement and regional assistance programs, the AHS was able to call on substantial aid agency funding to assist in updating the standard of charting and producing ENC coverage for the PNG area. This charting element is part of a much broader Asian Development Bank initiative to improve maritime safety and maritime administration in PNG.

The project enabled the AHS to modernise the PNG chart folio by using a combination of remote sensed imagery, specific ground truthing surveys by RAN hydrographic ships, contracted chart and ENC production, and project management and quality assurance by the AHS. The result is a win-win situation, effective use of aid agency funding, for modernisation of the PNG chart folio for the benefit of PNG, and achievement of complete ENC coverage of PNG meeting Australia's commitment to our bilateral charting agreement. The project is on track for completion in the first half of 2008. I believe that a similar approach could be used to assist other regional states to update their charting coverage.

In 2005, the completion of ENC coverage of Australian waters was estimated to be between 2018 and 2020. The Accelerated ENC Program is A\$9 million project funded from within the Department of Defence budget, commencing in 2006 and due for completion in 2010. It is a combination of chart conversions, metric conversions

and chart production from source material, and some survey activities are scheduled in Hydroscheme to support this project. The chart and ENC production activities are being undertaken by a combination of in-house production teams and contracted outsourced production, but the AHS retains the final quality assurance function. The biggest task in the project is to bring all charts onto the common horizontal and vertical datums required to support ENC. The first phase is the modernisation of the chart folio, followed by the production of ENC cells based on the modernised chart scheme.

The project is scheduled for completion in 2010 and will result in full ENC coverage of Australian waters being available before the carriage of ECDIS and ENC is mandated by the IMO. This project is a good example of how a relatively small investment can make a big difference to achieve an eight year reduction in the schedule production timeline. It delivers exceptional value to Defence by having ENC available to support the introduction of the navigation display system across the Fleet, and to Australia by supporting maritime domain awareness, and reducing the navigational risk in Australian waters by enabling all shipping to navigate on official Australian information through ECDIS.

The most complicated current initiative focused on supporting maritime zone protection is known as the Fisheries Protection Surveying and Charting Project. It is an A\$18.5 million government funded initiative to survey and chart the hitherto uncharted areas of the Torres Strait and northern inner Great Barrier Reef to enable freedom of movement for patrol and enforcement vessels and to improve the effectiveness of Border Protection Command operations in this complicated, dangerous and environmentally sensitive region. The project commenced in 2006 and will be completed by 2010, and significant progress has already been achieved. The contract for phase 1 of the project was awarded in September 2006 and 6500km² of the area have already been surveyed under contract. Another contract for a similar area was awarded in October 2007 and this survey is currently underway. RAN hydrographic ships have also completed substantial surveys as part of this project. The first new charts of the area have already been produced based on the receipt of the preliminary survey data. At this stage, these charts are available for Defence and enforcement agency use only, but following the full quality assurance of the data, authorised navigational charts will be released for public use.

There are many other exposed areas on the northern Australian coast, where the freedom and to navigate for patrol and enforcement vessels is restricted by lack of adequate hydrographic surveying and charting information. The current Hydroscheme program fully employs all RAN survey vessels, to meet a range of government hydrographic commitments. But, if we need more done quickly, augmentation through the use of contracted hydrographic survey services is certainly a viable option.

Thus far I have spoken about the AHS contribution to national survey and charting responsibilities, so I will now briefly outline the direct contribution the HMFEG makes to Australian Defence Force operations.

In Operation ANODE in the Solomon Islands, the HMFEG used historical source data and remote imagery to provide a large scale operational plan to enable vessels to access a wharf for resupply and thus achieve the mission objective.

In Operation SUMATRA ASSIST in Banda Aceh, the Deployable Geospatial Support Team embarked in HMAS *Kanimbla*, conducted a beach reconnaissance, and then identified and surveyed a suitable approach for the landing craft to successfully beach and disembark heavy equipment. This 'field product' was produced for the aid of the small craft coxwains.

In Operation ASTUTE in East

Timor, the strategic decision was to conduct an amphibious landing of Australian forces to the west of Dilli, in order to assemble an overwhelming land force before approaching the seat of the civil unrest in the capital. The element of surprise, and the display of overwhelming power would prevent any organised resistance and reduce the chance of casualties. However, the planned amphibious objective area lay in an unsurveyed area outside the extent of the existing navigational chart. In this operation, the RAN Deployable Geospatial Support Team deployed with the amphibious group, commenced survey operations on arrival at 1900, confirmed the suitability of the primary landing area and the unsuitability of the secondary area within three hours and provided a field hydrographic chart by daybreak (12 hours) to enable the landing to proceed in safety and on schedule.

Conclusion

So whilst the vast ocean areas that surround Australia provide huge resource potential, a trade and communication superhighway and a high level of inherent security, they also present a huge challenge and obligation in ensuring their own management and protection. But, it is the hydrographer's depiction of these waters on the nautical chart that makes the information universally available to mariners, makes it possible to navigate safely and makes it possible to pursue successful court action against incursions, when they are detected.

I contend that the essential element underpinning the effective management, conservation, exploitation and protection of our vast maritime zones is the comprehensive hydrographic surveying and charting of them.

The challenge of protecting Australia's maritime region is one that must be met with international cooperation, appropriate application of resources and continuous resolve if Australia is to maintain the integrity of its marine resources and national borders and thus continue to reap the benefits from this vast and valuable resource.

And while not even I would claim that AHS surveying and charting alone can protect Australia's maritime zones, I hope we can all agree that they cannot be adequately protected without the essential hydrographic surveying and charting information that is provided by the RAN Australian Hydrographic Service.

Maximising Strategic Options in Constrained Strategic Circumstances: The Future Underwater Warfare Capability

Peter Briggs

For the past four years, Project SM 2020 of the Submarine Institute of Australia Inc (the Institute) has been considering the requirements for a future underwater warfare capability for Australia. Deliberations have included two international conferences, the most recent in November 2006 and a number of workshops.

In December 2006, the Institute's SM 2020 team¹ completed a study for the Chief of Capability Development, Department of Defence, into the strategic setting; capability and roles required of a future underwater warfare capability; lessons learnt from the *Collins* class submarine project; and the industrial and political aspects arising from the project to acquire this capability.

This paper summarises the major findings and conclusions from these various considerations; it remains a team effort.

At the centre of this capability is a future (manned) submarine, supported by:

- an indigenous submarine design and research and development (R&D) capability
- a variety of other systems, including unmanned underwater and unmanned aerial vehicles
- a dynamic command, control and intelligence system.

I will use the terms 'future submarine' and 'future underwater warfare capability' to distinguish between the submarine component and the overall capability. I will approach it in a top-down fashion to consider:

- the strategic setting facing Australia in the period to 2050
- capability and roles: what is it that only submarines can do?
- force structure considerations
- design issues
- Collins lessons learnt in the context of the future underwater warfare capability
- industry issues
- personnel issues.

The Strategic Setting

FORCES SHAPING THE FUTURE

Without attempting to predict the precise shape of Australia's strategic environment in the period 2020-50, it is already clear that there are powerful forces at work that will determine both the strategic settings within which Australia will need to make

its strategic choices and the boundaries within which Australia will seek to exercise its policy freedoms.

The rise of both India and China, the re-emergence of Japan as a strategic actor, and the uncertain future role of the United States, are all shifting the ground beneath our feet.²

Overall, the prospects for global peace and stability are gloomy: the convergence of ideological extremism driven by fundamentalist Islam and significant changes in global power balances indicate major strategic discontinuities. In the Asia-Pacific region, continuing adjustments in the great power balance, together with continuing political, social and economic dislocation in the Pacific island countries indicate ongoing instability.

THE KEY STRATEGIC DRIVERS

Radicalised Islam will continue to mount a fundamental and violent challenge to the value system of liberal democratic societies, and the threat of the use of asymmetric force – particularly terrorism – will continue, sponsored by both radical non-state groups such as Al Qaeda and by fundamentalist states such as Iran and Syria. Australia and western interests in Southeast Asia will continue to be targets for such acts of violence as is evidenced in the Philippines and Indonesia.

From the perspective of Australia's defence strategy, it is important to recognise that terrorism operates at the interface between the clash of values (that is, the clash between the absolutist values of radicalised Islam and the values of democratic liberalism) and the antagonism that traditionally defines relations between states pursuing opposing political and strategic objectives.

States, particularly those that subscribe to political principles opposed to democracy and individual rights, will continue to exploit opportunistically the potential that always exists for destabilising the security of their opponents by supporting instability on their opponents' borders. This may extend to support for groups that espouse terrorism.

For Australia, the political, economic and institutional fragility that characterises most of the states in its immediate neighbourhood raises the double-headed spectre of large-scale domestic violence fomented by external interference.

China and India will emerge as major global and regional strategic players, exercising political, economic and strategic power in pursuit of their national objectives while at the same time constraining others in the pursuit of theirs. The centre of gravity of global economic power will continue in an easterly direction in the period of the strategic outlook so that, by 2050, it sits largely on the Indo-Chinese border.

A fierce global competition for resources will become an increasingly important strategic factor, particularly energy (both hydrocarbon and nuclear), key strategic minerals and water. China and India will compete in this domain with the industrialised nations – the United States, Japan and the members of the European

Union – as well as the emerging industrialised nations such as the members of ASEAN, key South American nations such as Argentina, Brazil and Mexico, the emerging powers of the Middle East (particularly Iran) and Russia.

Whilst Australia is well endowed with energy sources, the trend is heading from sensitivity to energy interruption, to one of vulnerability:

- ninety seven per cent of our transport sector relies on petroleum products of which 76 per cent is imported, most from the Asia Pacific region
- this trend is increasing
- Geosciences Australia predicts that Australia's net self-sufficiency in oil will decrease from 84 per cent to 20 per cent over the next 20 years
- indigenous refining capacity is declining and being replaced by offshore refineries
- the developing countries in our region are experiencing huge increases in their own energy requirements.³

We have a growing dependence therefore on imported oil and petroleum imports, refined in countries that are themselves increasingly vulnerable to an interruption in supplies.

Water will be an emerging issue for many in the region: 'The consequences for humanity are grave. Water scarcity threatens economic and social gains and is a potent fuel for wars and conflict.' This will also translate into increased demand for energy, to provide water by desalination.

The political, economic and strategic reach of the United States will, in relative terms, reduce. While it will remain the wealthiest nation in per capita gross domestic product (GDP) terms, the balance of power between the United States and its competitors will shift, and the United States will no longer enjoy the freedom of action that accompanied its status as the sole superpower.

The message is clear: based on current trends, by the middle of this century, the world will see a Chinese economy that is significantly bigger than that of the United States in purchasing power parity terms, and an Indian economy that is approximately the same size as that of the United States. There are significant assumptions underpinning these predictions. One significant proviso is China's ability to maintain social cohesion and stability. Ross Terrill is optimistic in this regard: '.. the future is always more open than we prognosticators of China's future judge. China repeatedly eludes the limits set ... transcends the categories offered by past and present foreign mythmakers.'5

This means that, with China, India, and Indonesia having economies approximately 30, 20 and three times bigger respectively than that of Australia, our global strategic environment will be fundamentally different from that of 2007.

Climate change is likely to impose major stresses on the region: a number of small Pacific states may disappear, the impact of changing sea levels is likely to be felt throughout the Indonesian and Philippine archipelagos, and the inundation of large low-lying areas such as the Ganges delta is likely to initiate major population pressures on the Indian subcontinent. The impact of this on our security environment

is by no means clear, but the possibility a significant impact on the global economy and strategic discontinuities cannot be ignored. I note that Professor Paul Dibb is more optimistic in this regard.⁷

INCREASED IMPORTANCE OF THE MARITIME ENVIRONMENT

Against this uncertain future strategic outlook, the maritime environment will become more significant in both economic and strategic terms. Sea lines of communication, increasingly more critical for the economic and energy sinews of the global economy will become more heavily populated and hence, the vulnerability to commercial shipping will increase.

The value of international trade flowing through this region will more than double by 2020, and possibly triple by 2030 ... the number of ships sailings in this region will more than double.⁸

The maritime security environment will also become more demanding. The investment being made in maritime capability throughout the region will give nations the capability to assert their maritime sovereignty rights, including in the undersea environment. The growing dependence on the sea for resources derived from it or carried on it will provide the stimulus to use this capability. Surface and sub-surface passage will be subject to legal and quasi-legal interference and constraint. In short, more countries will seek to practise undersea denial. There is also an increased probability that non-state actors will use various forms of sea denial, such as mine laying.

Access for surface warships or military aircraft may become constrained in many circumstances. It is not difficult to imagine a scenario in which a regional country finds the overt presence of an Australian ship or military aircraft an embarrassment in its relations with one of the regions recently emerged economic giants. Submarines, on the other hand, are able to exploit their stealth and will continue to provide governments with an option in this scenario.

REGIONAL INVESTMENT IN SUBMARINE CAPABILITY

Significant investment is underway by regional nations to acquire or improve their submarine capability. Modern Western European technologies are being fielded in many of these capabilities. India and China are also acquiring European and Russian submarine technology of considerable sophistication. Indonesia's program to acquire 10 Russian *Kilo* class submarines is the most recent example. By my reckoning, publicly available figures indicate that by 2025, there will be in excess of 130 modern submarines in our region (in addition to those of Australia and the United States).

China is upgrading its nuclear powered submarines and India is also likely to acquire nuclear powered submarines; both will also field submarines with a nuclear strike capability.

These developments illustrate a near universal acknowledgement of the force multiplier effects of modern submarine forces and their ability to present a real threat to a potential aggressor that requires a disproportionate effort to neutralise.

AUSTRALIA'S NEED FOR A STRATEGIC STING

Allan Behm has coined the term *decisive lethality* to describe Australia's need for the ability to deliver a decisive blow in its defence:

Australia's strategic problem is unique: how to manage the defence of 20% of the earth's surface (including the EEZ) with 0.3% of the world's population? The answer lies in good policies that reduce the prospects of war – strategic diplomacy – working in tandem with defence capabilities that are decisively lethal should they be employed. Such capabilities are not premised on weapons of mass destruction. But neither can they be premised on massive conventional capabilities, because Australia has neither the resources nor the people to develop and maintain them. Rather, decisive lethality is premised on tailor-made capabilities that Australia is uniquely able to develop and deploy, for which effective counter-measures exceed the capacity of possible adversaries.¹⁰

This attribute becomes all the more important given the struggle to access the increasingly scarce and critical resources outlined above, a significant portion of which reside under Australia's control. For example:

- Australia has the world's largest uranium reserves 28 per cent of the planet's known supply¹¹
- Australia's economically demonstrated resources of zinc, lead, nickel, mineral sands (rutile and zircon), tantalum, uranium and brown coal remain the world's largest, while bauxite, black coal, copper, gold, iron ore, ilmenite, lithium, manganese ore, niobium, silver and industrial diamond rank in the top six worldwide.¹²

A strategic sting is designed to make an aggressor avoid a military confrontation with Australia. Let me demonstrate why we believe Australia's future underwater warfare capability constitutes this critical strategic sting.

Submarines: 'The Special Forces of the Navy' – What is it That Only Submarines Can Do?

AUSTRALIA'S REQUIREMENTS OF ITS SUBMARINE FORCE - THE STRATEGIC STING OF CHOICE?

Turning to Australia's requirements of its submarine force; the submarine's unique capabilities of stealth, long range and endurance that allow it access in key areas denied to other platforms will be critical in the scenario ahead of us. Other platforms can do parts of these missions; none offers the covert combination of capabilities of

the submarine. Neil James, Director of the Australian Defence Association, likened submarines to the special forces of the navy during a recent media interview. The analogy is a good one; operating far behind the traditional front lines, independently observing and reporting and where appropriate, striking at key points when least expected.

The correct investment strategy in a future submarine force will confer a significant strategic deterrent capability for Australia, not only measured in Defence terms but also contributing to the security of energy supply.

A significant factor in the deterrent value is the exorbitant and disproportionate cost involved in trying to counter a capable submarine force and the degree of doubt that exists that, regardless of the investment, the anti-submarine warfare (ASW) effort can succeed. Some commentators cite an investment ratio of greater than 100:1: every dollar spent on a submarine capability requires at least \$100 to counter and the desired outcome can by no means be guaranteed. This is a significant strategic return on investment.

The strategic setting outlined above will result in a reinforcement of existing roles and an expanded range of strategic effects to be achieved by Australia's submarine force. These new or modified strategic effects expand the roles required of the future underwater warfare capability, beyond those currently expected of the *Collins* force. Let me discuss briefly the most critical.

I should preface these points by emphasising the importance of good operational command, control and real time intelligence support to maximise the effect of submarine operations.

The Falklands War provides an example. The Argentinean Navy and Air Force demonstrated how not to do it – the one modern submarine available, the *San Luis*, was deployed independently, without the benefit of coordination with the aircraft assets employed. Even with this limitation and a defective fire control system, *San Luis* conducted three attacks, all unsuccessful, possibly due to the failure to prepare the torpedoes correctly. Regardless of these realities, *San Luis* tied up a huge amount of Royal Navy time and effort in defending against the threat and was never successfully attacked. ¹³

SURVEILLANCE AND INTELLIGENCE GATHERING

The ability to gain access to areas denied to other units, combined with its ability to concurrently observe activities underwater, on the surface, in the air and over the electromagnetic spectrum, are particular strengths. Combined with the ability to fuse and interpret the observations and react immediately to maximise the opportunities for further collection and understanding the activities makes a submarine a unique platform for this role.

The information provided will contribute to Allied and Australian knowledge, enabling us to gauge intentions, deploy diplomatic and military preparations and,

in the event of a contingency, position our limited military capability for maximum effect.

During the Falklands War, Royal Navy nuclear submarines positioned off the major Argentinean airfields, were able to alert the task force offshore to the departure and often, the composition of the departing waves of strike aircraft – critical information to enable the limited endurance Sea Harrier aircraft defending the ships to be positioned appropriately. ¹⁴

LAND STRIKE

A submarine fitted with land attack cruise missiles is able to position within launch range without alerting the adversary, withdraw quietly if not required, or launch on instruction and withdraw without provoking or offering an opportunity for a further engagement.

While suitable land strike cruise missiles can be carried in combination with other weapons such as torpedoes, mines and anti-ship missiles, this role requires a profile from the submarine that is incompatible with roles requiring a more proactive stance. Let me clarify this point:

- a submarine deployed on a land strike mission needs to find a quiet spot, at a suitable range from potential targets, keep well away from the adversary's ASW forces, avoid counter detection and await instructions
- compare this profile with a submarine required to gather intelligence or conduct more offensive operations – this submarine must go to where the action is and be much more proactive to be successful
- whilst a mix of weapons can be carried, the two roles cannot be easily mixed: a factor when force structure is being considered.

BATTLESPACE PREPARATION

The submarine's ability covertly to gain access to the denied areas, assess the environment and deployment of opposing forces, without alerting the opponent and relay this back in order to allow future task force operations in the area, make it a preferred option for effective battle space preparation.

With suitable capabilities embarked, the submarine is able to identify and if permitted, neutralise threats prior to a coalition task force or shipping convoy moving into in the area. Once the task force operation is underway, the submarine is able to provide direct support, (noting that a conventional submarine lacks the mobility to support a rapidly moving task force – but is able to do so for short periods or in key geographical areas) – thus requiring more than one submarine deployed along the line of advance.

Another example from the Falklands War: HMS *Spartan*, a Royal Navy nuclear submarine, was able to observe the mining of the approaches to Port Stanley and fix the position of the mines as they were laid – the Rules of Engagement did not allow the submarine to do a little offensive mine sweeping! ¹⁵

ANTI-SUBMARINE WARFARE

The mirror image of this capability is the challenge posed by the growth in regional submarine capability.

In a contingency, submarines will be able to seriously threaten the operation of surface fleets and commercial trade.¹⁶

Australian submarines are arguably Australia's most potent anti-submarine weapon: this is their most demanding role. This capability is enhanced by the optimised sensor suite possessed by a submarine compared with all other ASW platforms. Maintaining an edge across the spectrum of stealth, sensors, weapons, countermeasures and training is critical to success – an ongoing investment in R&D and programs to continually upgrade capabilities in *all* these areas is the price of a viable capability.

Where practicable our submarines should operate as part of an ASW network. However, there are many scenarios, where we will lack sufficient sea and air control to permit the deployment of surface and air ASW assets.

This is a very challenging role, it must be supported by the R&D effort to achieve a technology edge, current and accurate intelligence and executed by the most capable command and control support – these will be the difference between success and failure and all aspects of the underwater capability must be sustained and focused to achieve this. Despite all these efforts to ensure a winning edge, the margin between success and failure is small and attrition of own forces must be anticipated. This reality and the relatively low mobility of conventional submarines are key issues for the force structure considerations.

A NETWORK CONTRIBUTOR WITH UNIQUE ABILITIES

The submarines ability to gain access to critical, denied areas allows it to make a unique contribution to the network. The technical challenge is to do so without compromising the submarine's covert stance, off-board vehicles and low probability of interception communications channels are some of the tools to achieve this.

AN EXPANDED RANGE OF SPECIAL FORCES OPERATIONS

Given the strategic setting and trend for asymmetrical conflict, this is likely to be a growth area for the future underwater warfare capability. Exploiting the submarine's ability to covertly transport, launch and recover the Special Forces and their equipments, provide command and control and if necessary, a level of tactical fire support will be a significant design driver.

It is also likely to require the fitting of additional weapons capabilities, such as short range, tactical land strike and anti-air warfare missiles.

OFFENSIVE MINING

Mining using sophisticated, discriminating mines or mobile mines where necessary will enable us to deny access to selected areas or ports not under our sea or air control. Depending on the situation, these can be declared, leaving the choice to the adversary whether or not he wishes to challenge the mine!

These can be laid in areas inaccessible to other units and activated on command, if necessary, by the submarine.

THE ROLE OF UNINHABITED VEHICLES IN THE FUTURE UNDERWATER WARFARE CAPABILITY

Unmanned underwater vehicles (UUV) and unmanned aerial vehicles are a force multiplier that will extend the manned submarines reach effectiveness and survivability. Remote sensors deployed or carried by an unmanned vehicle could offer a winning advantage to the larger submarine in an ASW encounter with the smaller submarines proliferating in the region.

These vehicles are a key component the future underwater warfare capability and should be considered an integral part, to be acquired as part of the overall project. It is a major area for R&D and a design driver for the future submarine.

Force Structure Considerations

TOP LEVEL CAPABILITY - WHAT AUSTRALIA WILL REQUIRE OF ITS FUTURE SUBMARINE FORCE

In considering the strategic setting and our geographical area of interest, it is likely that Australia will wish to concurrently maintain submarines at very long ranges (>3000nm) in the critical roles of surveillance, intelligence gathering, indications and warning and in the event of a contingency, land strike. Concurrently Australia will also wish to provide submarines in support of task force operations or for special force missions closer to home (2-2500nm).

The issue of concurrent roles and allowance for attrition of own submarines employed on offensive operations are additional factors to the calculation of the force structure required to achieve the strategic effects.

THE DEFENCE WHITE PAPER - AN OPPORTUNITY, NOT AN EXCUSE

The proposed Defence White Paper provides an excellent opportunity to consider these issues and identified the top level requirement for the capability. However, there is much to be done in the lead up to this project and limited time in which to do it; it could be a serious mistake to await the outcomes of the Defence White Paper before initiating the long lead activities.

WHAT OUR ALLIANCE PARTNER EXPECTS OF AUSTRALIA'S SUBMARINE FORCE

In view of the democratic and liberal values that both Australia and the United States share, the Australia-US alliance will remain a core feature of our strategy.

Arguably, the United States will place an increasingly high priority on Australia's capacity to provide a capable conventional submarine force as a contribution to that alliance. This is precisely the point that the then-Rear Admiral Al Konetzni made to the then-Minister for Defence John Moore in 2000, when, prior to its systems upgrade and noise reduction, *Collins* had already impressed at the annual RIMPAC exercise (news, by the way, that the then-Minister was not altogether too pleased to hear!). 'Mr Minister, the US Navy needs those boats!' It is reflected in the Agreement on Submarine Cooperation, signed by the Australian Prime Minister at the Pentagon on 8 September 2001 – three days before the terrorist attack.

CONCLUSIONS ON THE STRATEGIC SETTING, CAPABILITY AND ROLES AND FORCE STRUCTURE CONSIDERATIONS

The following conclusions are drawn from the first three sections of this paper:

- the likelihood of significant strategic discontinuities and major shifts in global power balance over the next four decades create a compelling case for the acquisition of a new and expanded undersea warfare capability to ensure there is no capability gap as the *Collins* class reach the end of its capability and hull life in 2025
- the strategic environment of 2020-50 demands an advanced underwater warfare capability, centred on a long-range, sophisticated submarine backed by a through life R&D based improvement program to achieve and maintain a qualitative edge
- Compared with *Collins*, the future underwater warfare capability will be required to operate in a more demanding environment, at greater range and to achieve an expanded number of strategic effects
- the underwater warfare capability will be a critical and unique asset in the nation's Defence capability; providing the strategic sting to deter 'would be' aggressors and if necessary causing them to desist from an aggressive solution
- it will provide an increasing important contribution to the United States alliance obligations
- the strategic effects, consequent roles, the need for concurrency and an allowance for attrition should be factored into force structure considerations
- the Defence White Paper offers an opportunity to set the top level capability, not an excuse for delay in initiating the long-lead activities.

Design Issues

SUBMARINE DESIGN - A COMPARATIVE REGIONAL ADVANTAGE

Given the importance of a submarine capability as a core defence requirement for Australia beyond 2020, Australia's regional pre-eminence as a designer, builder and

operator of submarines is a comparative regional advantage; it should be maintained as a matter of strategic priority.

Australia is currently one of the few countries to have mastered advanced defence operations in the underwater environment ... cannot readily be matched or countered by most potential adversaries ... in many future defence contingencies, this competitive advantage would be extremely useful and in some is likely to prove decisive. ¹⁷

A UNIQUE REQUIREMENT

Because of Australia's geography and interests, the design and operational characteristics of the submarine capability will represent a unique combination of factors:

- long transits from home bases in Australia to a distant patrol area, combined with the likelihood of short-notice contingencies will demand high levels of mobility and long endurance
- the nature of the littoral operating areas, stretching from the Arabian Gulf to the north Pacific will demand both high agility and prolonged covert operations in littoral operating areas
- as a result of the changes to the maritime operating environment noted above, Australia's submarine force will require a very low signature in all spectrums and at high speed, thereby imposing new demands on submarine design.

ACQUISITION STRATEGY

There are a number of options. After consideration of the various factors, we have concluded that a submarine developed from the *Collins* experience and pedigree is the lowest risk path.

Happily this proposed acquisition strategy has received a degree of bi-partisan political endorsement that provides a useful starting point for the project: both political parties have agreed in the run up to the feberal election that ASC is the clear choice to construct future submarine capability. ¹⁸

In our opinion, it is unlikely that competition between two design proposals will be practicable in the timescales now available and given the limited number of experienced personnel available to manage this project. The low-risk option is to develop from *Collins*. This development will entail substantial changes; the most visible will be the external hull shape, optimised for high-speed transit and a 'nose job' to streamline the critical first 5 metres – no row of torpedo tubes across a flat nose in the future submarine! This can be expected to:

- yield a 10 per cent energy efficiency gain over *Collins*
- improve sonar performance compared with *Collins*, particularly when moving at high speed
- reduce self-noise.¹⁹

Internally, new technologies will be critical to achieving a capability edge; perhaps the most challenging areas are associated with acquiring, storing and using energy for both transit to a patrol area and covert patrol when on station. Few if any of the equipments used in *Collins* will be available or appropriate for the future submarine; developing and integrating new equipments is a substantial design and construction task.

There will be a number of new issues for the designers and operators to weigh up and consider in the trade off process, some examples include:

- reconfigurability the flexibility to adapt for the role of the day
- carrying capacity the ability to accommodate and sustain the additional personnel and equipments associated with particular missions
- the unmanned underwater and aerial vehicles pose a particular challenge in this regard
- achieving sufficient design margins, such as space, stability to allow for future growth.

There are many other issues for consideration during the early phases of the design trade offs; these examples are not exhaustive, simply intended to make the point that this will be a developmental project and should be appropriately managed and resourced. The lessons from *Collins* in this regard include the need to:

- recognise and accept the developmental nature of the project allow an appropriate contingency in time, funding and scientific support to cope with the unknowns that are bound to arise
- assign the risks so that they can be actively managed by those best able to do so. This approach points to a relationship style of contract, not a 'black letter law' performance specification contract.

In the high risk software based systems, the low risk path is to evolve from current weapons, combat system and command, control, communications and intelligence (C3I) systems. When combined with the fitting of new land strike cruise missile, this strategy reinforces the need to maintain access to US technology.

AIR INDEPENDENCE

Given the threat environment arising from the strategic setting, it will be critical that the future submarine is able to operate completely covertly whilst in a patrol area without the need to snort to recharge batteries or refresh its atmosphere.

Current air independent propulsion technologies such as fuel cells or Stirling engines incur a substantial space and weight penalty; the solution adopted in many smaller European submarines is to remove battery and generator capacity to offer up space and weight. This is not an appropriate solution for a submarine wishing to complete long transits, quickly and with minimum indiscretion. The air independent propulsion offers no assistance in this phase as its precious and limited quantity of fuel must be conserved for the patrol area.

We should be looking to second generation air independent propulsion technologies and alternatives such as the nuclear batteries now under development in the laboratories.²⁰ There is a major developmental project entailed in achieving an operational capability – an early candidate for Defence Science and Technology Organisation (DSTO) and industry partnered R&D. The Russians appear to have solved this problem:

Russia's Sevmash shipyard at the Arctic city of Severodvinsk has completed a hybrid submarine powered by a diesel-electric plant *and* a small nuclear reactor ... known to some engineers as a 'teakettle' – to keep a charge on the battery, providing essentially unlimited underwater endurance on relatively quiet electric propulsion. In effect, this is an Air Independent Propulsion (AIP) system.²¹

ASC'S DESIGN CAPACITY

ASC is the Design Authority for *Collins*. Provided its ownership is appropriate, it is uniquely placed to be able to access the critical, sensitive technology from both US and European suppliers and combine this with its real world experience on the *Collins* class. No other potential designer offers this opportunity.

Its capacity to act as the Design Authority for a new submarine will depend on continuing efforts to build its internal capacity by judicious hiring of experienced personnel, suitable design development tasks in *Collins* through life development, a continuing relationship with Electric Boat and support of a European design house to provide the technology unique to a conventional submarine.

Given the correct investment in fostering this capability ASC is indeed the low risk option. What can be done using *Collins*?

FUTURE SUBMARINE CAPABILITY PROTOTYPING IN COLLINS

Collins class technology refresh/spiral development programs could serve to reduce the risk of design development work and prototype testing associated with the future submarine capability.

To be effective, this program must not only maintain the capability of *Collins*, but also provide a test bed to push the technology boundaries where appropriate, such as emerging battery technologies, second generation air independent propulsion systems and propulsion motor technology.

RESEARCH AND DEVELOPMENT PROGRAM

We should be seeking a technology 'leap' to counter the regional growth in maritime technologies. By First Pass in 2010, we must have identified those technologies that offer this potential and then develop these to enable a contract to be placed in 2016 to incorporate these into the future underwater warfare capability.

A through-life R&D program involving DSTO, ASC industry and technology partners will be essential to sustain the capability edge and is part of the parent navy obligation. The program should be used to deliberately foster and support small to medium enterprise companies in Australia, these companies have been the source of much of the leading edge innovation available in the *Oberon* and *Collins* programs.

Establishing the teams and relationships will take time. This work will provide a key input into the design trade offs to be considered in finalising the specifications and letting the contract in 2016.

The following areas are a sample of some of the areas likely to require indigenous R&D by DSTO and industry through all phases of the design, build and in service life of the capability:

- hull materials
- hull forms
- batteries
- air independent propulsion systems
- propulsion arrangements including motors and propellers/propulsors
- life support systems for the extended period of dived operations
- uninhabited vehicles, their interface with the submarine and measures to avoid compromising the covert stance of the parent submarine
- signature reduction measures, including coatings to reduce the submarines signature in all spectra, such as anechoic coatings versus active sonar, radar absorbent material versus radar, etc
- countermeasures operating in all spectra
- combat system, and sensors
- C3I technologies, including those to support networking in a hostile environment
- · ship control systems to reduce crew workload and numbers.

These programs also provide the essential entrée to our selected partners' R&D in these sensitive areas – part of the essential currency for a joint R&D project.

If the 'off the shelf' option is developed from *Collins*, what are the design drivers for this development?

THE KEY DESIGN DRIVERS

The key design drivers for a future submarine capability are identified in priority order are:

- stealth
- mobility
- · range and endurance
- payload including weapons, countermeasures and unmanned vehicles
- sensors and connectivity
- manning

- handling characteristics
- through life supportability and growth potential.

TIMESCALES

By 2025, HMAS *Collins* will be 30 years old and obsolete.²² If we are to avoid a critical capability gap, the future underwater warfare capability must be operational at this time.

Similar to the *Oberon* experience at this time of life, it will not be cost-effective to sustain or replace ageing systems, nor is it an option to extend *Collins*:

- it currently lacks the design margins (space, ship stability, power, cooling etc.) to sustain significant capability enhancements to meet the increasingly demanding environment and new requirements
- a life extension program is therefore likely to be a poor return on investment
- the attraction of this option to the bureaucrat, as a means of delaying a difficult decision should be resisted: it is a distraction and will result in a serious capability gap.

We must therefore field a new underwater warfare capability in 2025. Assuming our recommendations on the acquisition strategy are followed, the timescale (counting back) could be:

- 2022-24 What Have We Got? Three years of pre-acceptance trials; this is a critical part of the risk mitigation strategy and must not be regarded as a 'just in case buffer' or project float. During this period the submarine and its systems such as UUVs will undergo extensive trials to identify the inevitable, unexpected problems, resolve them and provide a submarine ready to commission and commence operational work up.
- **2016-21 Build It.** Six years to finalise the design and construct the first submarine. The contract must be let in 2016, that is, Second Pass in 2016.
- 2011-15 Resolve Design and Technology Issues and Finalise How You Intend to Acquire It. Four years to complete the design studies/trade-offs, develop the technologies to the point that they can safely be incorporated into the design and prepare the contract documentation for the design and build and supplier contracts.
- 2008-10 What Capability Do We Need? Where Are the Technology and Knowledge Gaps? How Do We Fill Them? Three years to establish the project teams, finalise the requirements and acquisition strategy, initiate the R&D teams, design teams, industry partnerships and government to government relationships whilst completing the initial studies to inform the design and trade off processes. By 2010 we must have identified those technologies likely to lead to the capability edge we seek.
- 'First Pass' 2010. This process assumes an acquisition strategy of developing from *Collins* to the future submarine using ASC as the Design Authority and builder, supported by the United States and European designers and equipment

suppliers. There are other models but none, we submit, that can achieve the end point with a lower risk profile in this time scale.

Nor can we afford to spend 2008 waiting for the Defence White Paper to tell us something we already know and have bi-partisan political endorsement for: there will be a future underwater warfare program, the long lead activities proposed in this paper will be relevant regardless of the implementation model decided following the strategic framework established in the Defence White Paper.

NUCLEAR POWER

The requirements for long transits and covert operations and potential adversarial nuclear powered submarines could justify the introduction of nuclear powered submarines into the Australian Defence Force order of battle. We submit that this is not a practical proposition in the timescales envisaged for the future submarine project. Apart from the significant political and public concerns to be overcome before implementing such a project, Australia lacks the critical regulatory regimes, industry capability and educational institutions to prepare appropriately qualified personnel. Unless and until Australia adopts nuclear power for electricity generation, these essential criteria are unlikely to be economically achievable.

Development of this option would therefore be a distracting and time consuming debate and misuse of our very limited resources to manage this project. It has the potential to derail the timely acquisition of a future submarine capability, leading to a significant capability gap.

ACCESSING SUBMARINE INTELLECTUAL PROPERTY

Access to and control over Intellectual Property is a key determinant of shipbuilding and repair capacity particularly in relation to vessel design and combat systems and their ongoing development and upgrades. Australia needs to be able to access the quote 'best of breed' in submarine systems and design to achieve the capability. These will be drawn from western European designers and our current submarine capability partner, the US Navy. All parties are particularly sensitive and wish to protect their submarine Intellectual property: governments who fund much of the R&D are very sensitive to exposing their leading edge submarine technology to third parties. Australia must be able to demonstrate that it is able to protect this information from third parties. This has significant implications for the future ownership of ASC.

An open market approach is therefore not likely to lead to the most capable solution; instead, access to this technology will require specific agreements between governments, the conditions attached may well limit the range of participants.

Selecting the right partners is therefore important; a critical test in this selection process is the depth and capability of their ongoing submarine R&D programs. This capability for original work is important in optimising the design, maintaining the leading technology edge in through life capability development and solving the

inevitable 'unexpected' in service problems that are the lot of a parent navy. This 'Team' capacity will also be a major factor in identifying valid design options for future underwater warfare capability.

Access to US submarine technology will need early resolution and probably, an extension of the current government-to-government agreement on submarine cooperation on the *Collins* class. Similar government-to-government level agreements may be required to cover European involvement.

However, noting the unique features of Australia's requirements and difficulty of accessing submarine intellectual property there are a number of areas where Australia will have to develop its own solutions to the problems. Examples are provided in the earlier consideration of the R&D issue.

DSTO working in conjunction with the US Navy and industry have demonstrated this capability in resolving many of the issues associated with the *Collins* program. Much of this Australian capability has now dissipated; it will require time and incentives to re-establish an indigenous R&D capability in a number of key submarine technologies. Given the lead times for such activities, this is now an urgent requirement.

CONCLUSIONS ON DESIGN ISSUES

- Australia should build on the capacity established by the *Collins* project to design and build the future submarine
- *Collins* can be used as a trials platform to reduce the risk of introducing new technologies for the future submarine
- time is tight, early agreement on the acquisition strategy and initiation of studies and R&D is now critical
- initiation of the long lead activities cannot await the conclusion of the Defence White Paper process.

Collins Lessons Learnt in the Context of the Future Underwater Warfare Capability

OUTCOME

The principal aim of the *Collins* program was to acquire a new class of submarines suitable for operations in the mid-1990s and beyond. Compared to a 'build to print' program (such as construction of, say, the *Upholder* class submarines based on 1970s technology), the *Collins* program involved a number of innovations and acceptance of risk to ensure the capability sought was appropriate to the future strategic environment. It is now clear that, despite its complexity and controversy, the aim was achieved and Australia acquired a world-class conventional submarine capability augmented by a strong industrial support base. In so doing, the foundation necessary for the future submarine capability program has also been established.

AUSTRALIA'S CAPABILITY TO MANAGE A COMPLEX DEVELOPMENTAL PROJECT

The *Collins* program demonstrated that Australia has the capacity to manage a complex submarine construction program as well or better than a European or US supplier. Deficiencies in the build phase related more to design and contractual problems, including with overseas suppliers, than to shortcomings on the part of Australian industry. While a future program will also involve a number of innovations and acceptance of risk, there will also be initiatives based on *Collins* experience that will mitigate risk. These include migration of some equipment/systems evolved in the *Collins* class, access to US Navy and European submarine technology, adoption of more appropriate contract terms and conditions and improved transition planning.

CONCLUSIONS ON THE LESSONS LEARNT FROM THE COLLINS PROJECT

The *Collins* project, despite its complexity and controversy, delivered an excellent strategic capability for Australia. A future submarine project will have a much stronger starting point as a result. The government and Department of Defence should have strong confidence in Australia's capacity to manage and deliver the capability.

Industry Issues

GLOBAL MARKETPLACE

The global marketplace for submarine construction has undergone considerable consolidation in recent years particularly in the United Kingdom, Germany and the United States. While a number of countries construct submarines under licence, only Germany, Russia, France and most recently, Spain are active in the export market. None of the western suppliers are building a submarine that meets the capability required of the future submarine for Australia.

AUSTRALIAN SHIPBUILDING SKILLS BASE

Commonwealth investment in the *Collins* class has greatly boosted the skills base of naval shipbuilding in Australia. The base was further enhanced by the selection of ASC to construct the Air Warfare Destroyer.

COMMITMENT TO THE AUSTRALIAN SHIPBUILDING INDUSTRY

Recognition and commitment by government of the strategic importance of the naval shipbuilding industry and relevant industry at large has given the industry greater confidence in its future and should encourage investment in its workforce, facilities and innovation.

COMPETITIVE TEAMING FOR EFFICIENCY

In addition to the design support provided by the United States and European designers, competitive teaming through commercial alliances between overseas suppliers and local industry for the supply of systems and components offers the best prospect of ensuring efficient Australian construction.

Early selection of industry partners may be required where substantial development of the system is required in order to meet the requirement and to encourage mutual investment and sharing of risks.

OWNERSHIP OF ASC

The future ownership of ASC must facilitate access to submarine intellectual property in the complex and sensitive scenario outlined above. This is essential to maintain the new design through life, including the need for future modifications. To avoid future conflicts of interest and to demonstrate that Australia is able to protect 3rd parties sensitive technology, it is essential that the ownership of ASC be 'fully Australian' owned and controlled.

In our opinion we should not rush the sale process; it is important to 'get it right'. The ground rules for accessing the critical intellectual property should be fully understood and complied with as a pre-condition of the sale. We would also get full value for ASC if it were sold with the future submarine project on the books.

CONCLUSIONS ON INDUSTRY ISSUES

- the global market for conventional submarine design and construction has shrunk considerably since *Collins* was designed
- Australia's industry base has grown significantly during the same period
- ASC is the clear choice to design and build the future submarine; it will require
 design support from the United States and consultancy design support from
 leading European designers
- the pre-conditions attached to ASC's access to these technology sources should be understood and complied with in the sale of ASC.

Personnel Issues

SUBMARINE PERSONNEL SKILLS SHORTAGES

The availability of submariners to support the role of Defence as an 'informed buyer' with the skills and abilities to manage the future underwater warfare capability program will be a significant issue.

As was predicted at the time of the decision in 2000, disbanding the submarine policy capability in Canberra has left a significant gap in experienced submarine skills to mount and manage this project. It has also removed a career path for mid seniority submarine specialists and, arguably, contributed to the significant loss rate of these personnel.

Currently, the RAN has a severe shortage of senior submarine qualified engineers and operators. Very few of those in the Service have the experience, networks and understanding to guide a complex project through the labyrinthine processes of Canberra. Given the time scales and shortage of personnel, lateral solutions will be essential.

The transition from *Collins* to a future submarine capability will also pose significant personnel challenges for the operational submarine force. Manning the operational submarines and generating the surplus crews to transition to the new capability will be a demanding challenge. Against the backdrop of the current shortages, with insufficient crews to man the operational submarines, this will require priority allocation of scarce RAN manpower resources to achieve.

NON-UNIFORMED EXPERTISE

The civilian submarine technical capability in Canberra has also been substantially reduced from that previously available to mount and conduct the *Collins* project. Filling these gaps in a timely fashion will require lateral solutions to make use of the skills available from industry and within the Department of Defence to best effect.

CONCLUSIONS ON PERSONNEL ISSUES

- the shortages of skilled personnel in Defence and the RAN to oversee the project are a significant limitation and must be factored into the acquisition strategy
- a sustained priority allocation of the RAN's scarce manpower will be required to recover from the current shortfall, sustain the project and transition into the future submarine.

Summary

The opportunity to continue the development of a nationally important capability is clear. In so doing, Australia can maintain the national capability edge enjoyed for so many decades and also enhance its indigenous capacity to further develop and sustain this unique force multiplier. We should grasp it with both hands.

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- 26 Admiral Furusho Koichi, JMSDF, 着任に際し訓示 [Official Instructions of the Chief of Maritime Staff], Maritime Staff Office, Japan Defence Agency, 28 January 2003.
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- 29 Toshi Yoshihara, James R Holmes, 'Command of the Sea with Chinese Characteristics', Orbis, Vol. 49, No. 4, Fall 2005, pp. 685-687.
- 30 Liu Yi-chien, 'China's 21st Century navy prospects', Ta Kung Pao, FBIS China Daily Report, FBIS-CHI-1999-1011, 1 September 1999, quoted in Euan Graham, *Japan's Sea Lane Security, 1940-2004.* A Matter of Life or Death?, The Nissan Institute/Routledge Japanese Studies Series, New York, 2006, p. 205. For an updated assessment of the Chinese naval power, cf. Andrew S. Erickson, 'Can China become a Maritime Power?', in Toshi Yoshihara and James R Holmes, *Asia Looks Seaward. Power and Maritime Strategy*, Preager Security International, Westport, 2008, pp. 70-110.
- 31 NIDS, 'China', *East Asian Strategic Review, The Japan Times*, Tokyo, 2001, pp. 199-202; JDA, *Defence of Japan 2005*, pp. 207-209; JDA, *Defence of Japan 2006*, p. 99. Reportedly in September 2005, a JMSDF's P3-C identified 5 PLAN destroyers including one of the modern *Sovremenny* units navigating in the area of the Kashi (in Chinese, Tianwaitian) gas field near the midway line between China and Japan in the East China Sea.
- 32 Admiral Toru Ishikawa, JMSDF, 着任に際し訓示 [Official Instructions of the Chief of Maritime Staff], Maritime Staff Office, Japan Defence Agency, 27 March 2001.
- 33 JMoD, Defence of Japan 2007, Intergroup, Tokyo, 2007, pp. 185, 204-263.
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- 35 Koyu Ishii, 'Heisei no Hinomaru Kubo '16 DDH' no Opereshion' (Operations of the JMSDF's New '16 DDH'), Sekai no Kansen, 2005:4, pp. 106-109; Editorial Department, 'Kaijojieitai 2007-2008', pp. 14-15; 49.
- 36 Ian Nish, 'Britain and Japan: Long-Range Images, 1900-1952', *Diplomacy and Statecraft*, Vol. 15 No. 1, 2004, pp. 149-161; Ian Nish, 'The Historical Significance of the Anglo-Japanese Alliance', *Studies in the Anglo-Japanese Alliance*, 1902-1923, Discussion Paper No. IS/03/443, London School of Economics, London, 2003, pp. 40-47.

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- 44 Graham, Japan's Sea Lane Security, pp. 129-149.
- 45 Graham, Japan's Sea Lane Security, p. 133.
- 46 Admiral Toru Ishikawa, 'Japan Maritime Self Defence Force's Enduring Relationship with the U.S. Navy', *Sea Power*, December 2002, p. 32.
- 47 Captain Katsutoshi Kawano, 'Japan's Military Role: Alliance Recommendations for the Twenty-First Century', *Naval War College Review*, Autumn 1998, pp. 9-21; Vice Admiral Kawano has expressed similar views in an interview with the author, 14 October 2005.
- 48 Guy Toremans, 'Interview with Admiral Eiji Yoshikawa Chief of Staff, JMSDF', *Jane's Navy International*, January 2007, p. 34.
- 49 Admiral Ryohei Oga, JMSDF (Rtd), 海上自衛隊と私 [My Experience with the JMSDF], Sekai no Kansen, 1999: 1, pp. 176-177; JMSDF, Kaijojieitai Goju Nenshi, pp. 141-142.
- 50 Admiral Tsuguo Yada, CMS, JMSDF, 着任に際し訓示 [Official Instructions of the Chief of Maritime Staff], Maritime Staff Office, Japan Defence Agency, 15 February 1980.
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- 52 Mark J Valencia, *The Proliferation Security Initiative*, Adelphi Papers No. 376, Routledge for IISS, London, 2005, pp. 9-11.
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- 58 Editorial Department, 'Japan's Military Can Benefit Asia Too', *Straits Times*, 4 June 2003; Speech by Shigeru Ishiba, IISS-Asia Security Conference, Singapore, 5 June 2004.
- 59 Speech by Ishiba.
- 60 Kaneda, 'Kaijoieitai no Ninmu to Yakuwari', pp. 21-22. It is worth noting that major Japanese publications specialised on naval affairs and close to the JMSDF now regularly dedicate feature articles on PSI, describing it as one of the expanding areas of the JMSDF operational activity. For example, cf. Editorial Department, 日本近海の2005年を占う四つのキーワード [PSI Spelling Japan's 2005 Maritime Activity in four Key Words: PSI], 2005:19, pp. 20-23; Editorial Department, 護衛艦の新たな任務それがPSIだ [PSI: The New Role of the Escort Ship'], Gakken, Tokyo, 2006, pp. 12-15.
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- 62 Isami Takeda, 'Taking the Lead in Regional Maritime Security', Japan Echo, 2004:12, pp. 49-50.
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- 64 Valencia, The Proliferation Security Initiative, pp. 62-63.
- 65 Valencia, The Proliferation Security Initiative, p. 63; also JDA, Defence of Japan 2006, pp. 338-340.
- 66 Ministry of Foreign Affairs (MOFA), 'Overview and Evaluation of the PSI Maritime Interdiction Exercise "Pacific Shield 07" Hosted by the Government of Japan', <www.mofa.go.jp/policy/un/disarmament/arms/psi/overview0710.html>, accessed on 13 April 2008.
- 67 David Turner, 'Japan Considers Law to Play Full Part in UN Action', Financial Times, 16 October 2006.
- 68 Graham, Japan's Sea Lane Security, pp. 190-193.
- 69 Takeda, 'Taking the Lead in Regional Maritime Security', p. 50.
- 70 For instance, in a major step to improve military ties, the Chinese missile guided destroyer *Shenzhen* arrived on 28 November 2007 in Yokosuka for a four-day visit of Japan. 'Japanese DM: Chinese Warship's Visit To Japan Conducive To Building Mutual Trust', *People's Daily Online*, <english.people.com.cn/90001/90776/90883/6309809.html>, accessed on 27 November 2007.
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- 72 Aurelia George Mulgan, 'Australia-Japan Relations: New Directions', *Strategic Insight*, Australian Strategic Policy Institute, Canberra, 2007, pp. 4-6.
- 73 On this point, it is worth noting that since the end of the Cold War, the JMSDF has invested considerable efforts in a wide range of mutual confidence-building activities such as joint exercises, visits of ships, personnel exchange, conferences, high-level meetings. JMoD, *Defence of Japan 2007*, pp. 362-75.
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- International Monetary Fund (IMF), World Economic and Financial Surveys: Regional Economic Outlook - Asia and Pacific, October 2007, IMF, Washington, 2007, p. 42.
- 2 Asia has surpassed the European Union in share of trade to gross domestic product (GDP), see The World Bank, East Asia Update, March 2006, p. 4. For a longer term assessment of economic growth in Asia, see Francis Ng and Alexander Yeats, 'Major Trends in East Asia: What are the Implications

for Regional Cooperation and Growth?', *World Bank Policy Research*, Working Paper No. 3084, June 2003, p. 2, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=636446, accessed 20 January 2008, stating that from 1975 to 2001, Asia's share of global trade increased three-fold, to just under 19 per cent, and, more recently, doubled from 1985 to 2001. In comparison over the same period, NAFTA's share of global trade increased by only 1 per cent, and the EU (15) actually experienced a decline.

- 3 See The World Bank, *East Asia Update*, p. 4. In just the last several years, Vietnam (11 January 2007), Cambodia (13 October 2004), Nepal (23 April 2004), Taiwan (1 January 2002), and China (11 December 2001) have joined the World Trade Organization (WTO). For a list of member states as of 27 July 2007, see WTO, available at <www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e. htm>, accessed 12 December 2007.
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- 13 Dennis Blair and Kenneth Lieberthal, 'Smooth Sailing: The World's Shipping Lanes are Safe', Foreign Affairs, Vol. 86, No. 3, May/June 2007, p. 7.
- 14 Guo Xinning, 'Anti-Terrorism, Maritime Security and ASEAN-China Cooperation: A Chinese Perspective', *Trends in Southeast Asia*, 2005, No. 15, p. 9.
- 15 Joshua Ho, 'Maritime Counter-Terrorism: A Singapore Perspective', Paper Presented at the Workshop on Maritime Counter Terrorism, Observer Research Foundation, New Delhi, India, 29-30 November 2004, p. 2.
- 16 United Nations Convention on the Law of the Sea (LOSC), 10 December 1982, A/CONF.62/122, International Legal Materials, Vol. 21, p. 1261, entered into force 16 November 1994.
- 17 For example, the different legal understandings on whether LOSC permits intelligence gathering activities in the exclusive economic zone (EEZ) of a foreign state contributed to the well publicised political and policy-oriented clash between the United States and China on the status and legitimacy of the US Navy EP-3 that collided over China's EEZ on 1 April 2001. See Mark J Valencia, *The Proliferation Security Initiative: Making Waves in Asia*, Adelphi Paper 376, Routledge, London, 2005, pp. 16-18. See also Michael Bahar, 'Attaining Optimal Deterrence at Sea: A Legal and Strategic Theory for Naval Anti-Piracy Operations', *Vanderbilt Journal of Transnational Law*, Vol. 40, 2007, pp. 6-7 (suggesting that the highly evolving field of maritime security operations, in particular, is in clear need for legal theories as well as strategic choices in order for improved multilateral relations so that effort can be expended on targeting actual maritime threats rather than disputing with potential international partners).
- 18 The debate on the use of torture and detention as a means to prevent acts of terrorism, in particular, has dominated much of the legal and public policy eye, placing incredible stress on

the desire and need to find an acceptable balance between competing legal rights and policy objectives. Examples of various – and at times creative – attempts to harmonise a solution for the problem are Alan M Dershowitz, *Why Terrorism Works: Understanding the Threat, Responding to the Challenge*, Yale University Press, New Haven and London, 2002, pp. 131-64; Oren Gross, 'Are Torture Warrants Warranted? Pragmatic Absolutism and Official Disobedience', *Minnesota Law Review*, Vol. 88, 2004, p. 1481; and the plurality decision crafted by the US Supreme Court in *Hamdi v. Rumsfeld*, 542 US 507 (2004).

- 19 ReCAAP, 'About ReCAAP ISC', <www.recaap.org/index_home.html>, accessed 12 December 2007.
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- 21 ReCAAP, 'About ReCAAP ISC'.
- 22 See the ReCAAP Agreement Article 7.
- 23 ReCAAP Agreement, Article 1.
- 24 See the ReCAAP Agreement Article 1.1 and LOSC Article 101.
- 25 The ReCAAP Agreement Article 1.2.
- 26 It may be noted that, strictly speaking, very little 'piracy' actually occurs in the Malacca Strait according to the LOSC definition used by ReCAAP, since most of the attacks on ships occur within the twelve-mile limit of state territorial waters or archipelagic waters. For this reason, the International Maritime Bureau has adopted, for statistical purposes, the following broad definition: 'Piracy is an act of boarding any vessel with the intent to commit theft or any other crime and with the intent or capability to use force in the furtherance of that act.' See Catherine Zara Raymond, 'Piracy in Southeast Asia: New Trends, Issues and Responses, *Harvard Asia Quarterly*, Vol. IX, No. 4, Fall 2005, <www.asiaquarterly.com/content/view/30>, accessed 23 January 2008.
- 27 In 2003 and 2004, 28 and 38 actual and attempted attacks were reported in the Malacca Strait, respectively; by 2007, the number dropped to 7. ICC International Maritime Bureau, *Piracy and Armed Robbery Against Ships: Annual Report*, 1 January 2007 31 December 2007, London, 2008, p. 5.
- 28 Phil DeCaro, 'Safety Among Dragons: East Asia and Maritime Security', *Transportation Law Journal*, Vol. 33, 2005, pp. 245-246.
- 29 John M Glionna, 'A Welcome Voice in a Sea of Chaos', Los Angeles Times, 13 November 2006, p. A1.
- 30 Vijay Sakhuja, 'Coercive Maritime Diplomacy', *Institute of Peace & Conflict Studies*, No. 1810, 3 August 2005, <www.ipcs.org/printArticle.jsp?kValue=1810>, accessed 24 January 2008.
- 31 Memorandum from Neil Smith, Secretary, Joint War Committee, Lloyd's, 7 August 2006, <www.the-lma.com/docimages/6736.pdf>, accessed 24 January 2008.
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- 33 The importance in establishing a universally recognised legal definition of terrorism has been expressed by the United Nations, General Assembly Resolution 42/159, United Nations Document A/RES/42/159, 7 December 1987 ('Recognizing the effectiveness of the struggle against terrorism could be enhanced by the establishment of a generally agreed definition of international terrorism.'). The historical difficulty in building international consensus on a legally meaningful definition of terrorism, however, has been significant, Reuven Young, 'Defining Terrorism: The Evolution of Terrorism as a Legal Concept in International Law and its Influence on Definitions in Domestic Legislation', *Boston College International and Comparative Law Review*, Vol. 29, 2006, p. 23.
- 34 Compare Mark J Valencia, 'Piracy and Terrorism in Southeast Asia: Similarities, Differences and Their Implications', in Derek Johnson and Mark J Valencia (eds), *Piracy in Southeast Asia: Status, Issues, and Responses*, Institute of Southeast Asian Studies, Singapore, 2005, pp. 84-85 (claiming that because terrorists want to call attention to their cause whereas pirates want to go unnoticed,

the two have different root causes and should thus be treated differently), with Graham Gerard Ong, 'Ships Can Be Dangerous, Too: Coupling Piracy and Terrorism in Southeast Asia's Maritime Security Framework', in the same book, p. 66 (suggesting that due to the reality of finite resources, it makes practical sense to couple the notions of piracy and maritime terrorism because of the similar violence and impact they have on people and society).

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- 36 David Fouse and Yoichiro Sato, 'Enhancing Basic Governance: Japan's Comprehensive Counter-terrorism Assistance to Southeast Asia', Asia-Pacific Center for Security Studies, 13 February 2006, p. 3.
- 37 US Department of State, 'What is the Proliferation Security Initiative?', June 2004, http://usinfo.state.gov/products/pubs/proliferation/, accessed 25 January 2008.
- 38 US Department of State, 'What is the Proliferation Security Initiative?', June 2004.
- 39 US Department of State, 'What is the Proliferation Security Initiative?', June 2004.
- 40 The other eight countries are France, Germany, Italy, the Netherlands, Poland, Portugal, Spain, and the United Kingdom. Samuel E. Logan, 'The Proliferation Security Initiative: Navigating the Legal Challenges', *Journal of Transnational Law*, Vol. 14, 2005, p. 255.
- 41 Logan, 'The Proliferation Security Initiative: Navigating the Legal Challenges', p. 255.
- 42 Statement of Robert G Joseph, Under Secretary of State for Arms Control and International Security US Strategy to Combat the Proliferation of Weapons of Mass Destruction: Hearing on Fiscal 2007: Emerging Threats Before the Subcommittee on Emerging Threats and Capabilities of the Senate Committee on the Armed Services, 109th Cong., 2006. As of 24 October 2006, 77 countries were listed as PSI participants: Afghanistan, Albania, Angola, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahrain, Belarus, Belgium, Belize, Bosnia, Brunei Darussalam, Bulgaria, Cambodia, Canada, Croatia, Cyprus, Czech Republic, Denmark, El Salvador, Estonia, Finland, France, Georgia, Germany, Greece, Holy See, Honduras, Hungry, Iceland, Iraq, Ireland, Israel, Italy, Japan, Jordan, Kazakhstan, Kuwait, Latvia, Liberia, Libya, Lithuania, Luxembourg, Macedonia, Malta, Marshall Islands, Moldova, Mongolia, The Netherlands, New Zealand, Norway, Oman, Panama, Papua New Guinea, Paraguay, Philippines, Poland, Portugal, Qatar, Romania, Russia, Serbia, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Tunisia, Turkey, Turkmenistan, Ukraine, United Arab Emirates, United Kingdom, United States, Uzbekistan, and Yemen. See US Department of State, Proliferation Security Initiative Participants, <www.state.gov/t/isn/71884. htm>, accessed 24 January 2008.
- 43 Sharon Squassoni, 'Proliferation Security Initiative (PSI)', Congressional Research Service, RS21881, Washington, 7 June 2005, http://fpc.state.gov/documents/organization/48624.pdf, accessed 25 January 2008.
- 44 Andrew C Winner, 'The PSI as Strategy', *The Monitor*, Vol. 10, No. 1, Spring 2004, p. 11 (stating that not only is the PSI intended to merely stay as an informal activity rather than evolve into an organisation, but that the current administration of the United States Government has refused to allocate separate funds for the financing of PSI activities, expecting all relevant government agencies to fund PSI-related activities from their regular budgets).
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- 47 As for as the legality of the PSI under domestic law, it may be noted that a United States court stated as dictum:

Even absent consent [of the flag state], however, the United States could prosecute foreign nationals on foreign vessels under the 'protective principle' of international law, ... which permits a nation to assert jurisdiction over a person whose conduct outside the nation's territory threatens the nation's security or could potentially

interfere with the operation of its governmental functions. US v. Gonzalez, 776 F.2d 931, 936 (11th Cir. 1985).

This dictum has been criticised by RR Churchill and AV Lowe, *The Law of the Sea*, Manchester University Press, Manchester, 1988, pp. 14-75, for being too broad a loophole for the infringement of freedom on the high seas.

- 48 See Mark Turner, 'UN Close to Agreeing N. Korea Sanctions', *Financial Times* (US edn), 14-15 October 2006, p. 1.
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- 50 Daniel H Joyner, 'The Proliferation Security Initiative: Nonproliferation, Counterproliferation and International Law', *Yale Journal of International Law*, Vol. 30, 2005, p. 539.
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- 52 Convention on the Prohibition of the Development, Production and Stockpiling and Use of Chemical Weapons and on their Destruction, 13 January 1993, US Treaty Document No. 21, 103d Congress, 1st Session (1993), International Legal Materials, Vol. 32, p. 800, entered into force 29 April 1997.
- 53 Convention for the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, 10 April 1972, US Treaty, Vol. 26, p. 583, International Legal Materials, Vol. 11, p. 309, entered into force 26 March 1975.
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- 66 Seoul Declines to Join PSI for Fear of 'Armed Clashes', THE CHOSUN ILBO (English edn), 14 November 2006, httml>, accessed 25 January 2008. Interestingly, in explicitly refusing to participate in PSI in part for suggesting the initiative is illegal, South Korean Deputy Foreign Minister Park In-kook stated, 'We support the principles and the purpose of the PSI but will not officially take part in the initiative considering the special circumstances on the Korean Peninsula'.
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- Initiative and the Evolution of the Law on the Use of Force', *Houston Journal of International Law*, Vol. 28, 2006, p. 771.
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- 69 Kofi A Annan, Secretary-General, United Nations, Address to the Madrid Summit, SG/SM/9757, 3 October 2005, <www.un.org/news/Press/docs/2005/sgsm9757.doc.htm>, accessed 25 January 2008.
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- 72 Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation, 10 March 1988, United Nations Treaty Series, Vol 1678. [hereinafter SUA Convention] and SUA (Rome) Protocol. Both the SUA Convention and Protocol entered into force on 1 March 1992. The IMO is the depository for both instruments. As of 8 August 2005, there were 122 parties to the SUA Convention and 111 parties to its Protocol.
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- 75 John R Crook (ed), 'United States Supports New Protocols Directed Against Use of Ships in Terrorism and Proliferation of Weapons of Mass Destruction', *American Journal of International Law*, Vol. 100, 2006, p. 225.
- 76 US Department of State, What is the Proliferation Security Initiative?.
- 77 Security Council Resolution 1540, Article 1.
- 78 Balkin, 'The International Maritime Organization and Maritime Security', p. 27, referring to SUA Convention Article 3*bis*(1)(b)(v).
- 79 Mark R Shulman, 'The Proliferation Security Initiative and the Evolution of the Law on the Use of Force', *Houston Journal of International Law*, Vol. 28, 2006, p. 797.
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- 81 Paris MOU on Port State control, 26 January 1982, International Legal Materials, Vol. 21, p. 1.
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- 90 The World Customs Organization (WCO) has also taken an active role in addressing the problems terrorism poses for maritime security, but the WCO's impact has been more limited that the IMO.
- 91 Balkin, 'The International Maritime Organization and Maritime Security', pp. 2-3. Article 1 of the IMO Convention reads:

To provide machinery for co-operation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning the maritime safety, efficiency of navigation and prevention and control of marine pollution from ships; and to deal with administrative and legal matters related to the purposes set out in this Article.

Article 1(a), Convention on the International Maritime Organization, Article 1, 6 March 1948, US Treaty, Vol. 9, p. 621, United Nation Treaty Series Vol. 289, p. 48.

- 92 Amendments to the Annex to the *International Convention for the Safety of Life at Sea 1974* [contained in Resolutions 1, 2, 6 and 7 and including ISPS Code], London, 12 December 2002. The ISPS Code was incorporated in the new Chapter XI-2 of the Annex to SOLAS.
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- 95 General Assembly Resolution 59/24, 51, United Nations Document A/RES/59/24, 4 February 2005 ('Welcomes the entry into force of the *International Ships and Port Facility Security Code* and related amendments to the *International Convention for the Safety of Life at Sea* on 1 July 2004').
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Pirates, Renegades, and Fishermen: Reassessing the Dynamics of Maritime Piracy in the Malacca Strait

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- 10 Bronson Percival, *Indonesia and the United States: Shared Interests in Maritime Security*, The United States-Indonesia Society (USINDO), June 2005, p. 8.
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International Law Perspectives on Trans-Tasman Maritime Security

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