

Future ADF maritime roles in the Asia-Pacific region

Dr Carlo Kopp

There can be little doubt at this time that the primary strategic maritime role of the ADF will need to be protection of Australia's sea lanes, including the air-sea gap, against hostile submarines, and where geography permits, hostile land based air power.



ASW will become a pivotal role in coming decades. Depicted a Boeing P-8A Poseidon LRMP aircraft dropping a torp.

The industrialisation of Asia and the resulting growth in national wealth across Asia has led to unprecedented improvements in military capabilities and supporting capabilities such as domestic military equipment development and national education. This is reflected across Asia in the growth of air and maritime power, especially in China and India. The resulting strategic changes have no precedent in recent times, and compare historically to the industrialisation of Europe and the United States more than a century ago.

These strategic changes are profound and deep and have been correctly labelled as 'pivotal', 'transformational' and 'seismic' in recent years. While these changes are producing a drift in the balance of global power, away from a West dominant for at least two centuries, the strategic response by Western nations does not reflect the importance of these strategic changes.

The United States 'strategic pivot to Asia' declared in January 2012 was a decade overdue. Trends leading to the current state in Asia-Pacific military capabilities were well established by the 1990s, but politically unattractive to the Bush Administration, and initially the Obama Administration. This was mainly due to political preoccupation with the globalised Islamist insurgency in the Middle East, Afghanistan, Central Asia and Africa. One US analyst remarked that '...while the Islamist insurgency was not an 'existential threat' to the United States as a nation state, it was a political 'existential threat' to the Bush and Obama Administrations in the post-911 media debate...'

The highly variable argument concerning China in two consecutive QDR (Quadrennial Defense Review) documents, and a dozen annual reports to Congress on Chinese military capabilities clearly support the proposition that the military-strategic dimension of Asia's growth was willfully ignored for dubious political reasons.

The Air-Sea Battle Concept, which was intended to become the centrepiece of the 'strategic pivot to Asia' remains more of a concept than a specific strategy, and it lacks the focus and depth of the 1920s' 'Plan Orange' concept for prosecuting a possible future war against Japanese expansion in the Pacific. This is not to say that the ASB cannot eventually evolve into a concrete framework for

strategic planning and force structure development, it has simply not happened as yet.

Australia's focus in maritime planning for the ADF will need to be adjusted to position the ADF for likely, and less likely but much more serious future contingencies, that may arise in the Indian Ocean and West Pacific geographical areas. This is an unavoidable necessity, but yet to be reflected in the Australian Defence debate, other than in the current argument over future submarines.

ADF MARITIME ROLES — THE COLD WAR

Often labelled as 'World War Three', the Cold War was a four-decade standoff between the Soviet Bloc and Western Alliance, punctuated by proxy wars in Korea and Vietnam, and a long running series of Soviet sponsored insurgencies across the developing world. While the conflict was driven primarily by Soviet ideological agendas for world dominance, Soviet strategic behaviour was far more pragmatic, and largely focused in two areas: a prevailing in a land war in Central Europe, while concurrently denying the West use of key maritime choke points and sea lanes. The multiplicity of Soviet sponsored insurgencies across the developing world were geographically concentrated in close proximity to key choke points; Latin America, Southern Africa and South East Asia being cardinal examples. Control of these chokepoints would permit the deployment of maritime patrol and strike aircraft, as well as submarines.

Much of the Soviet Voenno-Morskii Flot effort was concentrated on interdicting resupply lanes across the North Atlantic, and later protecting SSBN 'bastions' near Murmansk and Vladivostok against US Navy and Royal Navy submarines.

However, substantial deployments of V-MF aircraft, submarines, and often surface combatants were made to Cam Ranh Bay in Vietnam, Goa in Soviet-aligned India, Cuba in Latin America, Angola in Southern Africa, and other Soviet satellites and proxies.

Until 1992, Australia's Defence planning was primarily focused on the defence of the sea-air gap and forward defence of South-East Asia, with Indonesia being a major consideration. This agenda aligned well with broader Western Alliance agendas for the region, specifically in the sense that capabilities most effective in protecting the sea-air gap and Australian interests in the near region were equally useful for A2/AD (Anti-Access / Area-Denial) against Soviet V-MF assets operating in the region in the event of a full scale war.

The result of this 'confluence of interest' between broader Alliance needs and specific national needs was reflected in strong A2/AD capabilities against submarine threats. The Navy acquired a robust ASW capability in surface combatants, Oberon SSKs and, until its retirement, the HMAS Melbourne with its 32 Grumman S-2E/G Tracker ASW aircraft. The Navy operated a much larger number of ASW S-2E/G than the 20 Douglas A-4G Skyhawk strike aircraft acquired for the air wing.

The Air Force always maintained a robust maritime patrol and strike capability, evolving through the GAF Lincoln MR.31, the Lockheed P-2V Neptune, and eventually the Lockheed P-3B/C/AP-3C Orion. An important capability gain was the F-111, which provided unrefuelled strike capability, initially with dumb bombs and later with the AGM-84 Harpoon, beyond 1,000 nautical miles, or much further had tankers with booms been available.

As the Soviet regime collapsed in 1992, the ADF's capabilities for maritime A2/AD against surface and submarine threats were approaching a peak, with the Collins SSKs being built, and the RAAF deploying its B-707-338C tankers and digital upgrades for the F-111 and P-3C underway.

ADF MARITIME ROLES – THE POST COLD WAR PERIOD

The decade immediately following the Cold War was a period of strategic realignment, as the four decade long 'system' of competitive purchasing of military and economic aid for alignment or basing, from the competing West and Soviet Blocs, collapsed across the developing world. The resulting economic crashes, concurrent with the removal of Western and Soviet forces in-situ, rapidly saw a descent into chaos, as in many such nations long dormant ethnic and religious agendas percolated to the surface. While the civil war following the disintegration of the former



Australia operated a potent LRMP capability through the Cold War period.

Yugoslavia was the most visible in the West, it was but one of many such conflicts arising globally. Africa, the Caucasus and Central Asia saw varying degrees of turbulence, exacerbated by the 'fire sale' of surplus Warsaw Pact military equipment globally, at bargain prices.

The Desert Storm intervention of 1991 and repeated interventions in the Balkans, culminating in Operation Allied Force in 1999, profoundly influenced thinking about future capability needs across the Western Alliance. 'Pax Americana' envisaged a world with a single unchallenged and unchallengeable superpower, and its merry band of allies spending the coming decades performing short duration police action interventions against ramshackle 'tinpot' dictatorships armed with obsolete Soviet era weapons. Military capabilities developed through the Cold War for the defeat of sophisticated peer competitor nation states were aggressively downsized, and recapitalisation programs first trimmed, and all too frequently simply cancelled to save money.

The belief system centred in a future devoid of peer competitors to the West received intensive 'validation' with the 9/11 attacks on New York, in which a non-state actor improvised air power by using hijacked airliners as defacto oversized cruise missiles. What followed was a decade of intervention across the unstable Islamic world, with major effort invested into Iraq and Afghanistan. Funding long term large scale land force deployments rapidly drove the United States and many of its NATO allies into strategic overstretch, and an ongoing downsizing of 'conventional' capabilities and recapitalisation plans.

For Australia, focused for almost four decades upon planning around contingencies involving the military regime in Jakarta, which was a major driver in future force structure planning. Suddenly, without a specific threat or potential threat, Defence planning latched onto the idea of global interventions, in support of US-led coalitions. In this construct Australia would provide token contributions to alliance deployments, while using the ADF independently for lesser regional interventions. Since opponents in such campaigns are invariably developing nations, insurgents or failed states, capabilities to defeat advanced peer competitors were simply thought of as expensive luxuries. The large scale Canberra purge of senior officers during the 2001-2002 period is notable, in part by the type of officers purged – many of whom were leading advocates of capabilities intended to defeat advanced peer competitors. Their replacements were invariably advocates of no specific planning model at all, or ideological adherents to the prevailing ideology of the day – which was distant interventions in developing



Attack submarines such as this Soviet Akula were a critical maritime denial and interdiction capability during the Cold War.

nations and COunter-INSurgency campaigns in the developing world.

The past decade has been characterised by a progressively escalating arms race across Asia, itself characterised by the unrestrained proliferation of the most advanced equipment the Russian Defence industry could devise and produce, paralleled by transformational changes in an industrialising China.

Australia made a large investment in two large Canberra class amphibious LHDs along with three Hobart class Aegis AWDs to perform as escorts for the LHDs. The debate over future RAAF tankers was quashed, with a mere five KC-30A/A330-200 tankers procured. Efforts were made to rapidly retire the F-111 fleet in 2006, with the bureaucracy having to eventually settle for 2010. Two dozen F/A-18F Super Hornets were procured, realising a nett capability loss of at least 60 per cent. The idea of follow-on Wedgetail AEW&C aircraft was quickly abandoned. The F-35 Joint Strike Fighter, conceived during the mid 1990s around the prevailing idea of interventions against unsophisticated opponents, became the 'holy grail' of future RAAF capabilities.

The reality of the 'seismic shift' across Asia in 'peer-competitor' capabilities produced no discernable impact on the reasoning processes in Canberra Defence planning through that decade. The ongoing debate over the future submarine fleet remains primarily focused not on matters of strategy and capability, but on choices of platform and their industrial impacts.

The United States 'pivot to Asia' in early 2012 has yet to be reflected in any meaningful way in current planning for future ADF capabilities. This may well not happen, until there is a purge of ideological adherents to the 'COIN / distant



Two of the largest procurements over the last decade are the Canberra class LHDs, and the Hobart class DDGs, the latter intended to escort the former. This investment was made to provide the capability to deploy an amphibious force, in regional and global interventions in developing nations. Neither class is well suited to the future regional environment.



Submarines are a growing capability across the region. Depicted HMAS Waller.



Sukhoi/KnAAPO Su-30MK2 Flanker G maritime strike fighter of the PLA Naval Air Force.



Sikorsky SH-60R Seahawk ASW helicopter of the US Navy.



The Japanese Hyuga class DDH is a 19,000 tonne class ASW helicopter carrier. Two larger 27,000 tonne DDH vessels are under construction, intended to embark up to 14 SH-60K Seahawk ASW helicopters. While Japan is planning to use its DDH classes to perform both ASW and amphibious roles, there are no known plans for analogous dual role amphibious and ASW utilisation of the Canberra class LHDs.

“ While submarines present the risk of covert ambush attacks with modest numbers of cruise missiles, land based aircraft present the risk of large scale saturation attacks on SAGs, CVBGs and convoys with dozens of aircraft each carrying between two and six cruise missiles. ”

across the Canberra Defence organisation, as these individuals remain deeply invested in the choices made over the last decade.

THE FUTURE REGIONAL MARITIME ENVIRONMENT

There is no ‘rocket science’ required to divine the type of regional maritime environment the ADF will confront in coming decades. The pattern for the future has been set by the systematic competitive procurement of A2/AD capabilities across Asia since the end of the Cold War. Short of unlikely large scale developments, such as the complete democratisation and strategic realignment of China to the West, or the complete bankruptcy of China, there are no strategic forces in play which would counteract the well established competitive dynamic now seen in Asia. If United States fiscal woes cripple future capabilities to intervene in Asia, the result will simply be further intensification of the existing competitive arms race, as nations across Asia attempt to fill the resulting power vacuum.

The most pervasive trend in regional maritime A2/AD capabilities is the procurement or development and manufacture of modern air power, but also in submarines across Asia – both diesel-electric, with and without AIP (Air Independent Propulsion), and nuclear powered.

While submarine forces were well established, with major players across Asia during the Cold War, they have become de-rigueur even with second tier players at this time, including South Korea, Indonesia and Vietnam. India’s development of indigenous nuclear powered submarines, and China’s ongoing development of same, present as the upper tier of regional capabilities, paralleling Russian nuclear submarine deployments in the Far East.

No less importantly, there has been a pervasive shift toward missile armaments, supplementing or displacing torpedoes as the primary weapon carried by submarines. While we have yet to see specialised SSGs and SSGNs akin to the Soviet Cold War classes developed and built across Asia, this should not be discounted as infeasible. The techniques for SSG/SSGN submerged missile launch systems dates to the 1960s and 1970s, and is easily within reach of any nation in Asia building its own submarines.

Submarine launched cruise missiles range from the encapsulated Harpoon and its Chinese look-alikes, through Russian and Chinese developed Tomahawk lookalikes with land attack or anti-ship guidance, through to supersonic sea skimmers such as the Indian Brahmos/Yakhont / SS-N-26, and the Russian 3M54E / SS-N-27B Sizzler. With

satellite navigation and cheap inertial equipment now pervasive, submarines can generally be expected to possess cruise missiles with anti-ship, land-attack and dual role capabilities, and good ability to engage surface shipping in complex littoral environments.

The large scale proliferation of advanced subsonic and supersonic sea skimming cruise missiles, with anti-ship and/or land attack capabilities is one of the defining techno-strategic trends of this period, yet in the public Defence debate it has been largely ignored, with the focus being on much less numerous Anti-Ship Ballistic Missile (ASBM) and conventional ballistic missile capabilities.

No less importantly, most of these cruise missiles have been integrated into combat aircraft weapon systems. The parallel dimension of the Asian arms race has been the large scale proliferation of tier one fighters, specifically the Sukhoi Su-27/30 Flanker series and its Chinese built offspring, the Shenyang J-11B/BH/BS, J-15 and claimed ‘J-16’, and to a lesser extent, advanced F-15K/SG variants.

While submarines present the risk of covert ambush attacks with modest numbers of cruise missiles, land based aircraft present the risk of large scale saturation attacks on SAGs, CVBGs and convoys with dozens of aircraft each carrying between two and six cruise missiles.

Curiously, the devastating effects of the use of massed land based air power against shipping appear to have been entirely forgotten in the current debate on maritime matters. The 1940s experience of the Prince of Wales and Repulse sinkings, and the Battle of the Bismarck Sea, seem to have vanished from the collective consciousness. The Soviet V-MF concept of massed cruise missile attacks delivered by submarines and land based air power is equally absent. That numerous Asian militaries are emulating the Soviet concept on a smaller scale appears irrelevant in the contemporary debate.

FUTURE MARITIME ROLES FOR THE ADF

Australia depends heavily on sea lanes to support its economy, as these are the primary means via which iron ore, minerals, energy and agricultural products are exported. With the decline of the domestic manufacturing sector, sea lanes are also the primary conduit via which manufactured goods are delivered to Australian consumers, a dependency exacerbated by the extent to which Australia imports energy products, rather than using domestic resources in situ.

Should these sea lanes be compromised or cut by enemy action in a time of confrontation or conflict, Australia would be in genuine difficulty, as its economy is no longer structured around self

sufficiency. Revenues from exports would collapse, and the supply of energy for transportation and manufactured goods for consumers would likely end up rationed severely. Australia's ability to contribute forces to any regional contingencies depends on Australia's ability to economically sustain that military effort.

The means of threatening, compromising and possibly cutting these sea lanes are becoming a common feature of force structures across Asia – submarines and land based aircraft, all armed with anti-ship cruise missiles. Submarines due to their inherently covert nature, and often better combat radius performance, would be the weapons of choice. This reflects the geostrategic realities of the ostensibly now irrelevant Cold War era, and the reality, that long range A2/AD capabilities are inherently usable for denial operations against Australia's sea lanes.

There can be little doubt at this time that the primary strategic maritime role of the ADF will need to be protection of Australia's sea lanes, including the air-sea gap, against hostile submarines, and where geography permits, hostile land based air power.

While other roles such as disaster relief, expeditionary deployment and sustainment of ADF land forces, and other intervention centred roles will remain relevant, none possess the strategic importance of keeping unwanted foreign submarines and aircraft out of Australia's sea lanes, and by default, air-sea gap.

For the Navy this means a force structure planning focus centred in Anti Submarine Warfare, with

a secondary focus on making the surface fleet survivable against saturation anti ship cruise missile attacks. For the Air Force, this means recapitalisation and significant expansion of its maritime patrol and aerial refuelling fleets, with commensurate basing enhancements to permit sustained long range maritime patrol operations, and long range fighter intercepts. The ability to close down hostile basing and replenishment for submarines and aircraft across the region would significantly strengthen Australia's defensive posture in any such contingencies.

If we consider ADF force structure planning

imperatives of the late Cold War and 1990s period, the differences are, not surprisingly, only incremental. Should this be surprising in any way? A detailed discussion of specific capability enhancements needed to address the future maritime roles the ADF will need to master is a discussion in its own right, crossing the planning boundaries of all three Services.

Disclaimer: This article was compiled wholly from public domain sources, including the United States Navy and Defence Department websites, the Australian Defence Organisation website, past Defence Today articles, and Wikipedia.



Australia's planned fleet of five KC-30A tankers will not be sufficient in numbers to support counter-air and maritime strike operations across the air-sea gap and Australia's sea lanes.



Christmas comes early

**Join before 31 December 2012
and we'll waive two and six month
waits on extras***

Increased benefits on dental, physio, chiro,
natural therapies plus more from 1 November!

Health cover plus a whole lot more...

Navy + Army + Air Force

navyhealth.com.au/adfxmas | 1300 306 289

*Conditions apply. Use promo code "ADFXMAS" when joining. Offer not available to current or previous members of Navy Health.

