

Asian military trends and their implications for Australia

42

Andrew Davies

The countries of Asia have been in a state of rapid economic growth for several decades, with one dramatic (but brief) setback during the 1997 financial crisis. Growth rates have averaged almost 7%, well above the world average, meaning that economies doubled in size in just a decade.¹

One consequence of that growth has been a widely reported military build up around the Indian and Pacific Ocean basins. This ASPI *Strategic Insights* looks at the trends in Asian military spending, the capabilities being acquired and the implications for Australia's future force structure and strategic posture.



Australia, Japan and South Korea are all building air warfare destroyers fitted with the *Aegis* radar and fire control system. The Standard-Missile-3 (here being launched from Japan's JDS Kongo) can be used in the ballistic missile defence role. Photo: US Navy

Introduction

It is easy to interpret expansions in military power in terms of an ‘arms race’—a self-sustaining dynamic that leads to spiralling levels of procurement and spending in excess of the ‘steady-state’ levels typical of the countries involved. But that is a simplistic analysis. Instead, what we are seeing in many countries within Asia is reminiscent of the military programs that Western nations have been investing in for decades. Acquisitions of high-performance aircraft, warships and submarines by Western European countries do not generate concerns of rising militarism. So it is not necessarily the case that such purchases in Asia should be a cause for worry.

However, Asia has not had the half a century of focus provided by the Cold War threat of the Soviet Union that united Western Europe. There are unresolved historical enmities and disputes over territories and resources that have the potential to cause friction in the future and the dynamics of increasing military power are harder to predict. In many ways Asia is entering a regime of which we have no experience, in which all of the historical powers of this region are simultaneously wealthy, stable and militarily strong. As well, US primacy in the region, itself a legacy of World War II, is now coming into question for the first time.

In a region that is largely free of active conflict, arms acquisition and modernisation programs are motivated by a number of factors.

To understand the trends in Asian militaries, it is necessary to look at a number of indicators, beginning with spending patterns and moving on through acquisition programs and military restructuring to declaratory policy—though the latter is not always

helpful. Not surprisingly, there is no single narrative that accurately describes the entire region from Pakistan and India in the west around to the Koreans, Japan and Russia in the east. Many different motivations exist concurrently, and the resources that various countries can bring to bear vary markedly, resulting in a many-faceted picture.

In a region that is largely free of active conflict, arms acquisition and modernisation programs are motivated by a number of factors. These include:

- a perceived external threat
- hedging against nascent external threats
- hedging against future uncertainties in the absence of readily identified threats, often achieved by balancing or overmatching the capabilities of other regional countries
- strategic aspiration, manifested as the development of power projection and/or protection and denial capabilities
- continuing requirements for counter-insurgency and internal security forces in some countries
- the ongoing reorientation of national forces away from land-based post-colonial or counter-insurgency light infantry and paramilitary forces towards force structures that are based around high-end platforms, as is typical of prosperous and stable countries elsewhere
- the symbolism of modern military equipment for status and prestige
- combinations of any of the above.

Existential threats exist for a number of Asian countries. India and Pakistan are very watchful of one another, and have structured their nuclear and conventional forces with each other in mind. But that does not mean that they do not have other considerations. Both also have internal security issues to manage, and India is also an aspiring major

power. The Republic of Korea has an ongoing threat from the large conventional forces and (uncertain) nuclear capability of North Korea, but is also developing the air and naval forces that are typical of middle powers elsewhere. Similarly, North Korea's missile capability has been a strong driver of Japanese efforts to develop missile defence systems.

Perceived nascent threats drive many regional players. In particular, the uncertainty of the future trajectory of China has played a role in the development of many forces and strategies, including those of the United States. It has also been a factor in the development and strengthening of security relationships around the region. However, the defence spending data does not support claims that these hedging strategies have developed into an arms race between Asian countries. (The situation between the United States and China is more contestable, as will be described later.)

China and India are aspiring major powers; both have stated ambitions for blue water navies (including nuclear submarines and aircraft carriers) and long-range strike capabilities that will allow force projection far from home. China, however, also has what it sees as a threat in the form of a potential Taiwanese 'break away'. Consequently, it has devoted a lot of resources to develop denial capabilities around Taiwan so that the United States cannot easily intervene and in capabilities that blunt US advantages, such as space and command and control systems.

Some countries do not have readily identified threats, and realistically have no ambitions to develop military capabilities with unilateral global reach.

In such countries—epitomised by Australia—force structures are developed and maintained as a generalised hedge against future deterioration of strategic circumstances and/or as an insurance against

the acquisition of advanced capabilities elsewhere. The lack of specific and immediate threats has the tendency to result in force structures that do not emphasise any specific capabilities—what is sometimes (erroneously) called in Australia the 'balanced force' approach.

While there is little evidence of an Asia-wide arms race, there are certainly instances where developments by one country have resulted in similar developments among their neighbours. Following Singapore's force modernisation efforts, Malaysia has also acquired modern combat aircraft, and is in the process of acquiring conventional submarines.

Some acquisition programs are driven by national industry considerations. The in-country construction of military hardware is seen—rightly or wrongly—as a way to bootstrap high-tech industries and a way in which to achieve a degree of defence self-reliance. Finally, the lure of modern military platforms as a status symbol of national achievement should not be ignored.

The lure of modern military platforms as a status symbol of national achievement should not be ignored.

From an Australian viewpoint, there are two main trends that bear watching. First, the military acquisition programs of the nearby countries of Southeast Asia have the potential to erode Australia's qualitative technological edge—which was the explicit underpinning of the 2000 Defence White Paper.

Second, the rise of major powers further afield with strategic power projection and/or broad area denial capabilities has the potential to change the power balance of the wider region. Given that Australia is quite comfortable with the status quo, in which its ally the United States has been by far the strongest player

for decades, any potential change requires serious thought.

Defence spending

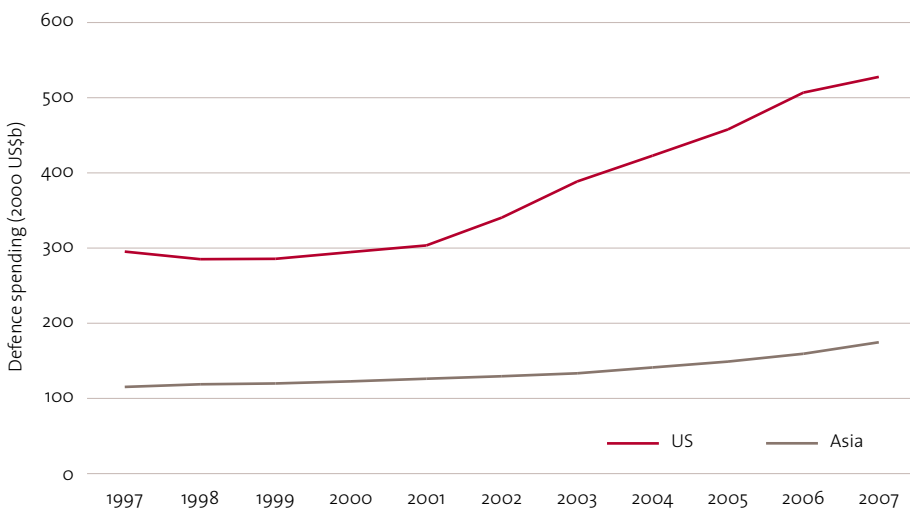
There are two measures of defence spending that provide useful inputs to a discussion of regional trends. The percentage of a state's gross domestic product (GDP) spent on defence is a good measure of the importance placed upon military matters—it allows us to infer what countries *think* about their military circumstance. But a more important measure is the absolute amount spent on defence, which is a useful (if blunt) measure of what a country can *do*. To give an extreme example, if the Solomon Islands began to devote 50% of its GDP to defence, it would certainly tell us that something had galvanised their attention, but we still wouldn't expect them to become a major power.

What then do spending patterns show us? Figures 1(a) to 1(d) show the spending over the last decade (in constant year 2000 dollars) for various combinations of regional states.² These graphs suggest a number of broad conclusions, which will be discussed and tested in later sections.

Figure 1(a) shows that the United States is, by far, a bigger spender on defence than any country in the region (as well as illustrating the dramatic increase in US spending since 2001). That is hardly a surprise, and it should be noted that US spending supports global forces. But it does tell us that the United States can be a significant player in our region for some time to come, should it choose to be. The most interesting question becomes whether there are areas in which the US can be seriously militarily challenged.

Figure 1(b) shows the spending patterns for the major players in North Asia. The rapid increase in Chinese spending is obvious, but it is interesting to see the response (or lack thereof) from Japan. As well as increasing markedly in absolute terms, Chinese spending has increased from a modest 0.9% of GDP to more than 1.5% over the last decade, although that is based on official Chinese figures and is likely to be an underestimate. Studies by the US-based RAND Corporation, the Council on Foreign Relations and the US Defense Department variously estimate China's actual military spending to be between 2.44% and 5.45% of GDP.³

Figure 1(a) US and Asian defence spending 1997–2007



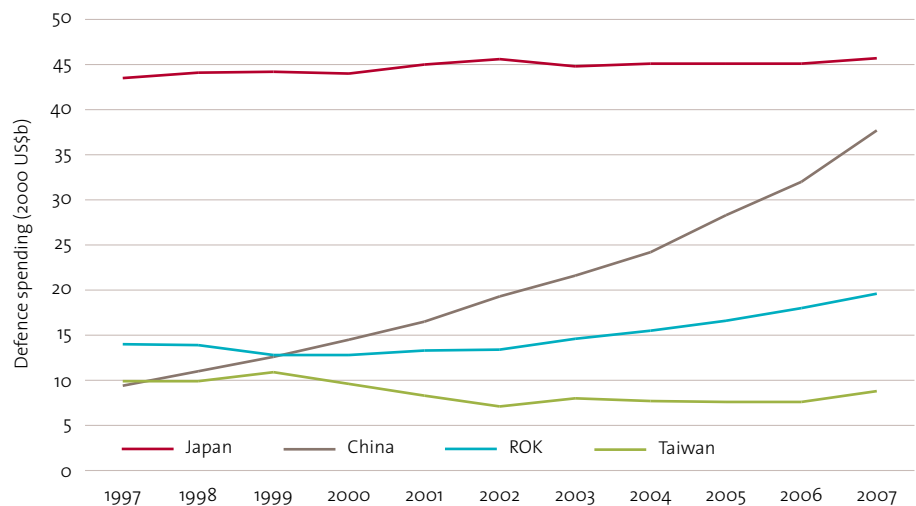
Source: Defence Intelligence Organisation (Australia)

Japanese spending trends show no evidence for an arms race. Military outlays have been nearly flat in real terms over the last decade and have actually declined slightly, from 1% to 0.9% of GDP. There is no sign that Japan has responded aggressively to increased Chinese spending, but there are two pertinent points to keep in mind. Firstly, Japanese military developments are constrained by the constitution and, while there are no formal spending limits, the 1% of GDP figure has come to be accepted as appropriate. Secondly, Japan currently spends more than China in absolute terms and has done so for decades, which has resulted in Japan currently fielding much stronger conventional military forces (with some niche exceptions). Similarly, South Korean spending has been flat in GDP terms while increasing modestly in real terms. Currently, there is little evidence in this data for an arms race in North Asia, despite much speculation and frequent claims to the contrary.⁴ But the potential for an arms race to develop cannot be discounted, and it will be interesting to watch spending patterns as China's total expenditure matches or exceeds Japan's.

There is little evidence in this data for an arms race in North Asia, despite much speculation and frequent claims to the contrary.

Figure 1(c) shows the spending patterns of China and India. As discussed later, there are some strong similarities in the approaches to military spending by these two countries. Over the last decade, Chinese spending has increased by a factor of four, while Indian spending has more than doubled (and has accelerated in recent years). The spending data is consistent with a major strategic competition between the two countries. However, Indian spending is flat in GDP terms (at just over 2%) and the overall increase has been due to a rapid general economic growth. We should be cautious in interpreting this as anything other than a proportional expansion of the military along with general economic development.⁵ It is more the nature of some Indian programs that sheds light on their ambitions as a rising power.

Figure 1(b) North Asian defence spending 1997–2007

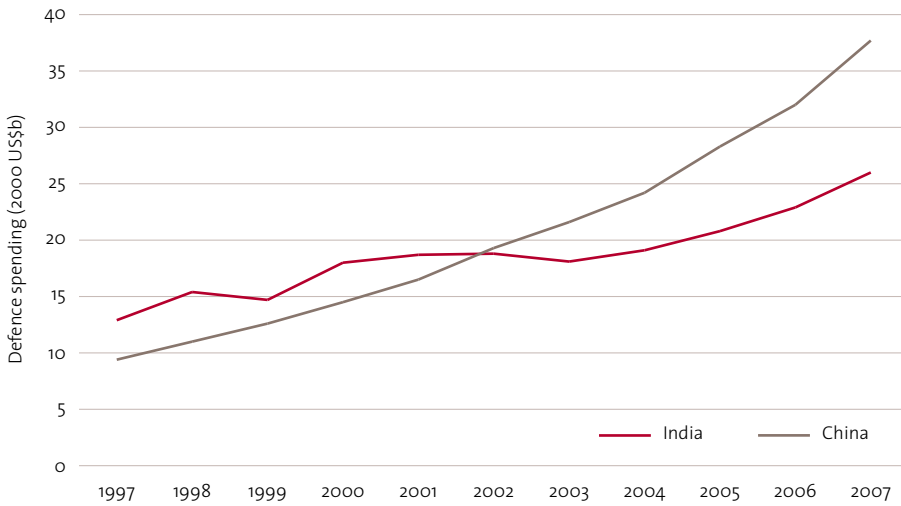


Source: Defence Intelligence Organisation (Australia)

Figure 1(d) shows the patterns of defence spending in Southeast Asia (including Australia). The data shows that Australia is, by a large margin, the biggest spender on defence in the region and consistently spends two thirds of the total amount of all other countries combined. Singapore is a clear second. The spending of other Association of Southeast Asian Nations (ASEAN) states remains modest. There is no growth in terms

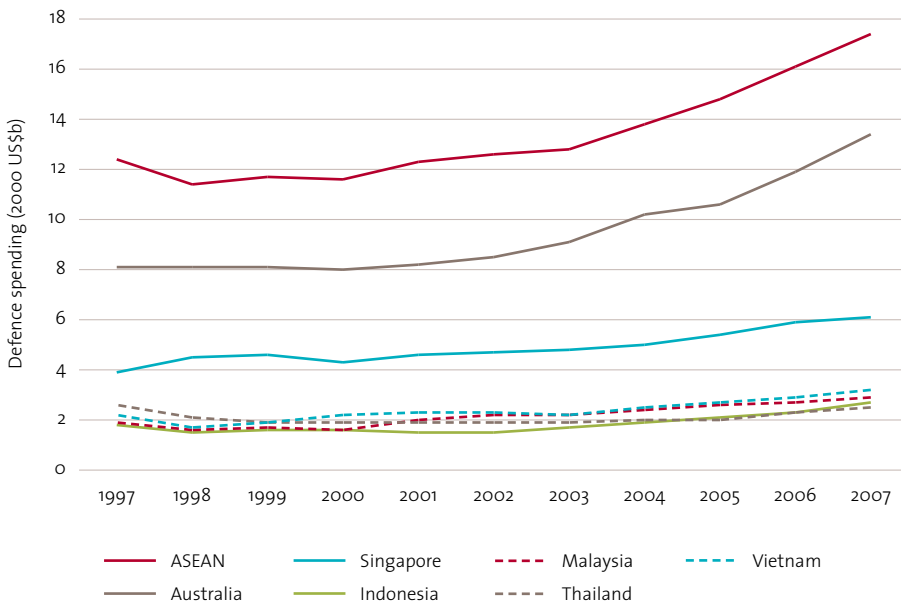
of percentage of GDP, and real spending increases seem to be driven by economic growth rather than by changed strategic assessments. Bucking the trend, Australia has increased spending from 1.8% of GDP to 2.0% in the last few years, although the growth has been more to do with the cost of operations than investment in new equipment, which has seen only modest increases.

Figure 1(c) Indian and Chinese defence spending 1997–2007



Source: Defence Intelligence Organisation (Australia)

Figure 1(d): Southeast Asian defence spending 1997–2007



Source: Defence Intelligence Organisation (Australia)

Acquiring capability

The governments of Asia are spending hundreds of billions of dollars per year on their militaries. Most of the money (around 75–80%) goes into maintaining and training the existing forces, providing for spare

parts, fuel, ammunition and provisions and the salaries of personnel. (Table 1 shows the current military strengths of regional states.) Acquisition budgets and research and development programs constitute a relatively small proportion of total spending.

Table 1: Conventional military strength in Asia, 2008

| Country | Regular Force | Reserve Force | Tanks ¹ | Other Armoured Vehicles ² | Combat Capable Aircraft ³ | Helicopters | Major Surface Combatants ⁴ | Patrol and Coastal Combatants | Submarines ⁵ | Amphibious ⁶ |
|------------------------------|---------------|---------------|--------------------|--------------------------------------|--------------------------------------|-------------|---------------------------------------|-------------------------------|-------------------------|-------------------------|
| Australia | 54,747 | 19,915 | 59 | 1,304+ (in delivery) | 138 | 135 | 12 | 14 | 6 | 3 |
| Northeast Asia | | | | | | | | | | |
| China | 2,105,000 | 800,000 | 7,660+ | 5,350+ | 2,554 | 533 | 75 | 233 | 62 | 74 |
| Japan | 240,000 | 41,800 | 900 | 960 | 340 | 641 | 53 | 9 | 16 | 5 |
| North Korea ⁷ | 1,106,000 | 4,700,000 | 3,500+ | 3,060+ | 590 | 306 | 8 | 335 | 63 | 10 |
| South Korea | 687,700 | 4,500,000 | 2,390 | 4,622 | 563 | 481 | 44 | 75 | 12 | 10 |
| Taiwan | 290,000 | 1,657,000 | 926+ | 2,230 | 510 | 275 | 26 | 70 | 4 | 19 |
| Southeast Asia | | | | | | | | | | |
| Indonesia | 302,000 | 400,000 | 0 | 1,069 | 94 | 132 | 29 | 41 | 2 | 27 |
| Malaysia | 109,000 | 51,600 | 6 | 1,575 | 68 | 80 | 11 | 14 | 0 | 1 |
| Myanmar | 406,000 | no data | 150 | 545 | 125 | 66 | 3 | 67 | 0 | 0 |
| Philippines | 106,000 | 131,000 | 0 | 629 | 30 | 113 | 1 | 62 | 0 | 7 |
| Singapore | 72,500 | 312,500 | 196 | 1,924+ | 102 | 92+ | 9 | 29 | 4 | 4 |
| Thailand | 306,000 | 200,000 | 333 | 1,554 | 182 | 292 | 20 | 87 | 0 | 9 |
| Vietnam | 455,000 | 5,000,000 | 1,315 | 2,400 | 219 | 91 | 11 | 38 | 2 | 6 |
| South Asia | | | | | | | | | | |
| India | 1,288,000 | 1,155,000 | 4,509 | 2,983 | 599 | 531+ | 48 | 18 | 16 | 17 |
| Pakistan | 619,000 | no data | 2,461+ | 1,266 | 376 | 220 | 6 | 8 | 8 | 0 |
| Extra-regional states | | | | | | | | | | |
| Russia | 1,027,000 | 20,000,000 | 23,000+ | 27,190+ | 2,080 | 1,589+ | 62 | 74 | 67 | 45+ |
| United States | 1,498,157 | 1,082,718 | 8,023+ | 28,454 | 4,269 | 5,289 | 106 | 16 | 71 | 32 |

Notes: All figures are estimates and include some equipment held in store. Figures are not shown for coast guard and paramilitary forces.

1. Main battle tanks.

2. Includes light tanks, light armoured vehicles, armoured personnel carriers, infantry mobility vehicles and infantry fighting vehicles.

3. Includes fighters, bombers and armed maritime patrol aircraft.

4. Includes corvettes, frigates, destroyers, cruisers and aircraft carriers.

5. Includes nuclear and conventional submarines.

6. Amphibious ship categories, including: tank landing ship, medium landing ship, heavy landing ship, amphibious landing platform, landing ship logistic and helicopter, landing ship dock, assault landing ship and landing ship helicopter and dock.

7. The majority of North Korean submarines are coastal and inshore vessels.

Source: *The International Institute of Strategic Studies 2008*, *The Military Balance 2008*, Routledge, Abingdon; Australian Defence Portfolio Budget Statements 2008–09.

The most visible part of acquisition programs are platforms—vehicles, aircraft, warships and submarines. And all of these are now being acquired in significant numbers. In many cases plans for these purchases date back well over a decade, and were put on hold during the Asian financial crisis of 1997. A decade of solid economic growth since then has allowed those plans to be realised.

The approach taken by a country to acquisition largely depends on the size of its economy, its sense of place in the international community and its level of access to advanced technology. The aspiring major powers China and India conduct experimental and development programs in addition to extensive construction activities and off-the-shelf purchases. Established powers such as Australia, Japan and the Republic of Korea tend to buy existing systems, but often build their own platforms. Construction programs can be the production of foreign designs under licence or based on indigenous designs, usually incorporating weapon or sensor technologies from elsewhere. For example, Australia's air warfare destroyers will be of Spanish design, but will incorporate the US-designed *Aegis* combat system and US-sourced missiles. Smaller spenders tend to buy established designs as military off-the-shelf (MOTS) from established suppliers, with Western European countries and Russia often being the preferred vendors.

MOTS purchases allow significant leaps in capability without development risk. ASPI has written previously about regional submarine acquisition programs; MOTS purchases from Russia and other European suppliers have allowed regional nations to acquire credible capabilities in far shorter times than would be required to develop indigenous designs.⁶ Buying established designs avoids expense and minimises the requirement for the in-country industrial and technological capabilities required to

run complex development programs. It also allows countries to take advantage of the often vigorous competition for sales among arms suppliers.

But capability is not just equipment. In fact, obtaining the hardware is almost the easy part. Logistics and maintenance support is required to keep platforms operating, and the platforms must be integrated into command and control systems. Tactics have to be developed and crews trained and kept at a level of proficiency by regular training and exercising. Some Asian countries are beginning to appreciate the need for the command, control and support systems required to get the best from hardware they are acquiring, but many are not, and remain focused on the platforms almost as an end in themselves.⁷

Capability is not just equipment. In fact, obtaining the hardware is almost the easy part.

As is well known (through experience) in the West, the initial cost of a military platform is only a down payment on the through-life cost, which can often be three times the initial purchase cost. One of two things can happen with hardware purchases that are not thought through properly. The resources consumed by keeping ships at sea or aircraft flying will eat into future procurement budgets so that equipment is kept beyond its planned life—and never receives the upgrades required to keep it at the leading edge. Or, more likely, sailing days and flying hours will be curtailed, platform availability will be reduced and the proficiency of crews will fall, all of which will reduce capability. In the worst case, there will be little capability at all, and a few expensive platforms will become little more than photo-opportunities on national days.

Some Asian countries have recognised the principles of through-life capability management. China for example, appears to be making progress in developing the support structures and logistic chains required to capitalise on the investments made in hardware. And Singapore provides a model for efficient defence spending. The comparison of the combat aircraft acquisition programs of neighbours Singapore and Malaysia is illustrative of the issues that should be considered in defence purchasing.

After a long and rigorous period of evaluation of a number of aircraft from various sources, Singapore is in the process of acquiring a specially-developed variant of the Boeing F-15 that will be fitted with an active electronically scanned array (AESA) radar. They are also acquiring an extensive package of support systems, spares and already-integrated weapons. Their F-15 aircraft will operate in conjunction with air-to-air refuelling and airborne early warning and control (AEW&C) aircraft and the crews will be proficient and

US-trained. The other front-line combat aircraft type in service is the F-16 Falcon. Singapore has been operating the F-16 since 1988, and managed their fleet so that only the newest versions of the aircraft (Block 52 and 52+) have been retained. That means that maintenance and support requirements are spread over only two main combat types and that some weapons can be utilised by both aircraft types.

Malaysia, on the other hand, has taken a more piecemeal approach to the acquisition of its front-line combat aircraft. In the space of a decade, the Royal Malaysian Air Force acquired three different types, sourced from the US (eight F/A-18D Hornets in 1997) and from Russia (sixteen MiG-29N/NUBs in 1995 and a 2003 contract for eighteen Sukhoi Su-30MKMs). Malaysia has expressed interest in AEW&C aircraft, but it does not operate any and it also lacks air-to-air refuelling aircraft. Operating three different combat types in small numbers means that three fixed costs (for ground equipment, training



The ability to buy capable platforms 'off the shelf' allows regional nations to leapfrog development generations. Here a Russian-built Kilo-class submarine is transported to China by the heavy lift cargo ship SS *Sea Team*. Photo: US Navy

facilities, simulators etc) are incurred and each is amortised over a small number of airframes, reducing efficiency. The situation is exacerbated by having types from Russia and the US—meaning that there would be weapons only useable by specific aircraft or the costly and risky prospects of integrating Russian weapons onto US-aircraft or vice-versa (which Malaysia has tried and failed to do).

As we saw in Figure 1(d), Malaysia spends about half as much on defence as Singapore. To get the maximum value from its defence budget and keep the local military balance as level as possible, it would make sense to consolidate its spending on one or two types from the same supplier and use the savings to invest in the support elements and command and control systems that would multiply the combat effectiveness of the fleet. Singapore will get much more capability from each military investment dollar.

Even worse, some purchases seem to be made with little regard to the ‘critical mass’ or the support required to establish a viable capability, or even for the interoperability requirements with other elements of the same force. For example, since 2003 the Indonesian Air Force has operated just four Sukhoi *Flanker* aircraft (and even those comprised two different variants). The availability of this handful of aircraft has been limited and they have communication systems that are incompatible with Indonesian command and control systems. In 2006 Indonesia placed an order for six additional aircraft (adding two more variants to the mix). It is possible that these aircraft were acquired in order to familiarise the air force with modern combat aircraft, because the resultant fleet is too small to provide the training and numbers on the flight-line required to constitute a viable operational capability in anything but a short duration and very low-level air campaign.

Some purchases seem to be made with little regard to the ‘critical mass’ or the support required to establish a viable capability, or even for the interoperability requirements with other elements of the same force.

That does not mean that all small acquisitions are of questionable value. Notwithstanding the lack of cost-effectiveness of some programs, it is still possible for countries to acquire capabilities in inefficiently small numbers but still have a significant impact on the calculus of other regional countries. For example, a single submarine known to be at sea but whose position is otherwise unknown can greatly complicate the planning of naval operations, especially in littoral environments. Indonesia has ordered four to six Russian submarines.⁸ Even if the management of these platforms leaves something to be desired, they will not be lightly dismissed. They will certainly be more competitive in a combat environment and have more strategic value than a handful of aircraft of dubious capability.

There are many lessons to be learned by Asian states as they embark on programs to acquire sophisticated military equipment. Money will, on occasion, be spent to very little effect. More often, procurement processes will be less efficient than they could be. But as experience is gained and the ‘traps for young players’ are identified, future acquisitions will be better thought out and through-life considerations and costs will play a greater part in decision making. That will still not guarantee success in every instance. As Australia’s *Super Seasprite* helicopter project will attest, decades of experience is sometimes not enough.

ASEAN

For some ASEAN countries, the last two decades has seen internal instability and insurgencies become much less problematic than in the past, allowing those states to direct their focus outwards to their maritime approaches and economic zones.⁹ As a result, there is a trend away from large but light land forces towards air and maritime platforms. And some land forces are receiving heavy equipment such as main battle tanks.

It is important to note that most ASEAN countries have started from a low technological baseline. In the mid 1970s, ASEAN states could be characterised as having large (as measured as a percentage of the population and compared to Western states) but lightly armed standing forces with few major weapon systems, some of which were inherited from former colonial powers. The focus was on land forces and many were operating with obsolete major platforms. Thailand was an exception, but that was because of strong US support due to the proximity of Thailand to the war zone in Vietnam. Today a range of ASEAN countries operate sophisticated armoured vehicles, artillery pieces, combat and support aircraft, warships and submarines.¹⁰

Local competition has played a part in some arms acquisition decisions. Advanced combat aircraft seem to be a case in point. Singapore's purchase of F-16 aircraft in the 1980s was followed in rapid succession by acquisitions of modern aircraft by Indonesia, Malaysia, Thailand and Vietnam. And Malaysia's pursuit of submarines may well owe much to Singapore's own acquisition program.

However, while the element of competition is sometimes strong, the dynamic is not that of an arms race—as is shown by the flat spending profiles shown earlier. Competition can work in a number of ways, and strategic concern is only one driver. A desire to be

seen to be as successful and powerful as neighbouring countries can drive 'catch up' purchases without setting in train a spiral of arms acquisitions. If the percentage of GDP spent on defence is a guide to thinking, ASEAN states are content with status quo relativities.

A desire to be seen to be as successful and powerful as neighbouring countries can drive 'catch up' purchases without setting in train a spiral of arms acquisitions.

The drivers of competition can also be external. The commercial marketing efforts of Israeli, Russian, US and Western European firms will also lead to new technologies being fielded. But increased wealth will allow a gradual increase in the sophistication of the armed forces of the region, and we can expect an increasing range of modern systems to be introduced.

A good case study of the proliferation into ASEAN of advanced weaponry via marketing is provided by air-to-air missiles. In the 1990s, the US refused to export the advanced medium range air-to-air missile (AMRAAM) to Southeast Asia because there were no regional operators of beyond visual range (BVR) missiles and US policy was not to begin a competition. However, Russian suppliers showed no such reluctance and began offering BVR missiles to potential purchasers, including US ally Thailand. Eventually the US relented, and agreed to export AMRAAM to Thailand once other long-range air-to-air missiles entered the region.¹¹ Today Australia, Malaysia¹², Singapore and Thailand include AMRAAM in their inventory, and Russian AA-10 and AA-12 missiles are available for MiG and Sukhoi aircraft in service with Indonesia, Malaysia and Vietnam.

Barring a major economic downturn, the trajectory ASEAN states are currently on will continue into the future. Economic growth may level out because the impressive figures of recent years are harder to achieve from a higher baseline, but the funds available for military purchases will continue to increase.

Rising powers—China and India

China and India are aspiring major powers, and their military acquisition programs reflect their ambitions. Undoubtedly they are influenced by some of the same factors as the smaller ASEAN states. But, as well as acquiring the modernised land forces, combat aircraft, warships and conventional submarines now entering the inventories of many other Asian states, they are building long-range strategic capabilities and nuclear warhead delivery platforms.

China and India are aspiring major powers, and their military acquisition programs reflect their ambitions.

They are also funding ambitious indigenous development programs—with varying degrees of success. For example, both countries have undertaken ambitious and expensive programs to design and build nuclear submarines to complement their conventional fleets, and both have encountered significant technical difficulties. The first generation of Chinese nuclear submarines are reportedly noisy and unreliable and patrols have been infrequent and confined to near waters.¹³ India's protracted nuclear attack submarine program (the 'Advanced Technology Vessel') has been plagued by cost and schedule overruns.

There are many similarities in the approach of China and India to military developments, but there are also some differences that

illustrate their respective priorities. Both have expressed a desire to build forces that would allow them to project power away from their shores and to be able to protect their broadly-defined interests in, respectively, the China Sea and the Indian Ocean. But China has a focus on Taiwan and an ability to contest the Taiwan Strait that has no Indian counterpart. As a result, the Chinese have put effort into goal-specific capabilities that are designed to blunt US advantages. India, on the other hand, has to manage the local conventional and nuclear competition with Pakistan (as well as being acutely conscious of Chinese military developments). Because of the perceived threat from Pakistan, India maintains very large land forces. For example, the Indian Army fields over 3,600 artillery pieces.

A significant development in the last decade has been the uptake of long-range supersonic cruise missiles. Based on Russian designs, China and India have further developed the technology to acquire systems that allow strike operations on land or maritime targets from long range and with potentially high lethality. Western states (like Australia) continue to rely on subsonic US and European sourced missiles.

China

China is modernising its forces and has ambitions for substantial power projection capabilities. Advances made with space systems and missiles shows that Chinese R&D and industry is capable of making rapid progress. However, some ambitions will take longer to realise. For example, the Chinese Navy (People's Liberation Army (Navy), or PLA(N)) has ambitions to develop an aircraft carrier capability to project power far from shore. But, while an aircraft carrier capability would be consistent with a Chinese naval doctrine that includes dominance of the South China Sea, it seems to be a long-term goal. Little visible progress has been



The Russian-designed Sukhoi *Flanker* series of aircraft has been purchased by China (as shown here), India, Indonesia, Malaysia and Vietnam. A very capable aircraft with long range and excellent aerodynamic performance, the relatively low price compared to Western aircraft makes the *Flanker* an attractive proposition. Photo: US Air Force

made, and there are no known indigenous development programs underway.¹⁴ However, informed observers have speculated that a Chinese carrier building program might commence in the next decade.¹⁵

The PLA(N) is also introducing a new class of Landing Platform Dock amphibious ships that will allow the deployment of a battalion group with associated vehicles, logistics support elements and helicopters. These ships will provide a significant capability lift over the more modest amphibious vessels currently in service. As well as providing a boost to any putative cross-Strait operation, this development is consistent with the general Chinese maritime goal of being able to project force out to the ‘first island chain’—essentially anywhere in the East or South China Seas.

In the field of submarines, China has a more active approach that neatly illustrates their dual ambitions of local strength in the short term (with emphasis on the Taiwan Strait) based on conventional submarines and a longer-term blue water capability based on nuclear submarines. Oft-repeated reports of

a greatly expanded Chinese submarine fleet are untrue—it is more accurately described as a modernisation, with 1960s and 1970s designs being phased out as modern designs enter service. Their capability will improve as experience is gained, and PLA(N) conventional submarines have already demonstrated a willingness to operate in the same water as the US fleet.

Chinese submarine capability will improve as experience is gained, and they have already demonstrated a willingness to operate in the same water as the US fleet.

The nuclear submarines will (eventually) provide a wide ranging patrol capability and will also form an important arm of China’s strategic nuclear capability. While the first generation nuclear boats were problematic, the second generation incorporate many of the lessons learned and are likely to be a significant step forward. The PLA(N)

is developing the SHANG-class nuclear attack submarine and the JIN-class nuclear ballistic missile submarine (SSBN), which will contribute to China's nuclear strike capabilities as a back-up to road-mobile medium- and intercontinental-range ballistic missiles.

In terms of conventional weapons, China is working to develop and deploy a range of precision-guided cruise missiles, including long-range anti-shipping and land strike cruise missiles. While Chinese long-range aircraft are of ageing design, the stand-off capability of cruise missiles provides them with a credible maritime and land strike capability. As well, China has been working on terminal guidance mechanisms for ballistic missiles to allow them to target ships on re-entry. This is consistent with the assessment in the latest iteration of the Pentagon's annual review of Chinese military power that China is 'seeking the capacity to hold surface ships at risk through a layered capability reaching out to the "second island chain" (i.e., the islands extending south and east from Japan, to and beyond Guam in the western Pacific Ocean)'.¹⁶

Closer to the mainland, many Chinese military developments over the last decade have had the net effect of making the Taiwan Strait more contestable or of blunting the strengths of US military power. The much-publicised anti-satellite missile test in 2006 was a 'shot across the bows' of US space-based command and control and intelligence-gathering systems. Similarly, China is known to be developing computer network operation capabilities. In a crisis, China could seek to disrupt US command and control and information systems to deny US forces access to critical real-time intelligence. Against the superiority of US conventional forces, these asymmetric tactics, combined with the low cost and wide availability of computing power, have the potential to give China an edge where conventional force development cannot.

As well as conducting its own R&D programs, China is conducting a range of espionage operations against Western governments and industry. In 1999, the Cox Report presented to the US Congress detailed a wide-ranging program of activities apparently designed to acquire state of the art Western technologies, allowing China to leap-frog design generations. The target of these efforts includes US nuclear weapon technologies and stealth design techniques for aircraft and missiles.¹⁷

For the first time in its history, India will have the wherewithal to play a major role beyond the confines of the subcontinent and will field an increasingly sophisticated arsenal of strategic and tactical nuclear weapons.

India

Like China, India's improved economic circumstances have allowed a substantial growth in defence spending over the past decade. Modernisation has been the order of the day, with many weapons systems now facing block redundancy. India will continue to build forces to meet pressing border and internal security requirements, but it now has the resources to also develop a force projection capability through enhanced maritime and air force capabilities. For the first time in its history, India will have the wherewithal to play a major role beyond the confines of the subcontinent. In addition, India will field an increasingly sophisticated arsenal of strategic and tactical nuclear weapons.

India is now the largest importer of military hardware in the developing world.

The Soviet Union was India's preferred supplier of military equipment during the Cold War. Although it still purchases 75% of its military hardware from Russia, it is increasingly looking to Western suppliers. Despite ongoing efforts to develop indigenous capabilities, the ability of India's defence industry sector to meet its equipment requirements remains a distant prospect. With the notable exception of ballistic missile technology, the Indian Defence Research and Development Organisation (DRDO) has a poor record of delivering credible capabilities.

In keeping with its aim of becoming a dominant naval power in the region, the Indian Navy plans to enlarge and modernise its fleet from 140 to 180 warships by 2017 and has ambitions to incorporate modern aircraft carriers in the fleet. It currently operates a single obsolete aircraft carrier, the fifty year old INS *Viraat* (ex-Royal Navy HMS *Hermes*). Plans to replace the *Viraat* with a combination of ex-Russian and indigenously constructed hulls have run into difficulties. Negotiations with Russia on costs and schedule for refitting have on occasion been acrimonious, threatening to completely derail the project. And designing and building large and complex platforms such as aircraft carriers may be, at least for now, beyond the Indian shipbuilding industry.

Similarly, India's nuclear submarine program has struggled for years, though it may deliver two vessels early next decade. Despite that, India is also leasing two Russian nuclear boats, and will build under licence French *Scorpene* conventional boats to revitalise its aging submarine fleet and arrest the decline in its submarine force levels. India has plans for amphibious force projection capabilities and has recently purchased a decommissioned US Navy landing platform dock as a first step in building a fleet of up to four amphibious ships.

In recent years the Indian Air Force (IAF) strength has fallen from forty-five (authorised) to twenty-nine combat squadrons,¹⁸ but it is in the process of modernising its front-line combat aircraft. A competition between six manufacturers from the United States, Europe and Russia is underway to supply 126 multi-role combat aircraft, in addition to 180 Sukhoi Su-30MKI *Flanker* aircraft being acquired from Russia and by local production. Older aircraft in the Indian inventory will be upgraded and the IAF is developing the AEW&C and air-to-air refuelling capabilities required for modern air operations.

Similar modernisation programs are under way for land forces, where a large portion of the tank fleet requires replacement. An indigenous program has been protracted and has failed to meet the Army's requirements, suffering from poor accuracy and frequent breakdowns. So India is again turning to foreign sources, and will purchase 640 Russian-made T-90 advanced main battle tanks at a cost of US\$2 billion while upgrading some older T-72 models.

Missile systems have been the lone success story of India's R&D efforts. In April 2007, India successfully tested the nuclear-capable intermediate-range (< 3,500 km) two-stage *Agni III* after an earlier failure and is developing the longer-range *Agni V* (range > 5,000 km). Design work has commenced on an intercontinental ballistic missile with a range of up to 10,000km. India claims that it has demonstrated a nascent capacity to develop an anti-missile shield by intercepting ballistic missiles both in and outside the atmosphere during trials.¹⁹

Like China, India is introducing long-range cruise missiles with supersonic capabilities. The *BrahMos* missile, developed from a Russian design, has been in-service with the Indian Navy since 2006 and has

also been adopted by the Indian Army. Air and submarine launch versions are in development, as is a hypersonic scram jet variant that has reportedly achieved speeds of 5+ mach in laboratory testing.²⁰

Major power interactions

There is little doubt that the United States will remain a major power in the Asian region for years to come. In terms of land forces, the US has maintained a significant presence in Japan since the end of WWII and in the Republic of Korea since the Korean War. While both of those deployments are being reduced in size, the US continues to invest heavily in its base on Guam, which will become an operating hub from which US forces can project force throughout the Pacific.

The US Air Force has global reach and the US Navy has an unmatched blue water power-projection capability, with multiple aircraft carrier and expeditionary strike group deployments in the region at any given time.²¹ Despite the interest being shown in aircraft carriers by China and India, it would be decades at a minimum before either could match US carrier capability in the open ocean.

Its naval power allows the US to conduct operations against littoral or coastal targets anywhere in the world. The presence of a carrier battle group can send a powerful signal in its own right. During the Taiwan Strait crisis of 1995–96, the US Navy was able to deploy carrier battle groups to the seas around Taiwan at short notice in response to provocative Chinese military exercises. As well, the USS *Nimitz* transited the Taiwan Strait, in what was widely interpreted as a show of US resolve in support of Taiwan. The message sent by the US was unambiguously reinforced when US Defense Secretary William Perry said that ‘Beijing should know, and this will remind them, that while they are a great military power, the premier—the

strongest—military power in the Western Pacific is the United States’.²²

Its naval power allows the US to conduct operations against littoral or coastal targets anywhere in the world.

Needless to say, the incident created a strong impression in China and spurred the development and fielding of a range of asymmetric technologies, such as submarines and supersonic anti-ship missiles, which raises the stakes of such displays of US military power. As well, China now deploys around 900 short-range ballistic missiles opposite Taiwan and is increasing that number by around 100 missiles per year, potentially allowing China to devastate Taiwanese response capabilities before the US could intervene decisively.

While the US probably still has the capability of operating in the waters around Taiwan with a high expectation of success, today it would do so at higher risk than in 1996. And the risk level will only increase with time, as Chinese capabilities improve in number and sophistication. At some stage, the risk to US forces should they intervene militarily on Taiwan’s behalf will become unacceptably high.

While the advantages of proximity and geography are with China in near waters, further afield the US will continue to be the dominant power, albeit with more competition. And the progress that China has made in that direction has unsettled some other players in the region. Australia’s 2007 Defence Update identifies Chinese military power as having the potential to ‘create misunderstandings and instability in the region’ while the 2007 Japanese Defence White Paper goes a step further and identifies Chinese military modernisation as a major

security concern. The 2006 US Quadrennial Defence Review advocated cooperation with China that is balanced by prudent hedging against the possibility that cooperation might fail. One of the results of those lines of thought has been the development of a trilateral relationship between the United States, Japan and Australia. And that led to overtures to India to become part of a de facto alliance of democracies.

In contrast to its hedged strategy to China, the US has welcomed India onto the world stage and is actively courting Indian engagement, based on the judgement that a democratic power expanding its military does not present the same threat as an authoritarian one. In 2005, the Bush administration stated quite unequivocally that it is a goal of the United States to help India to become a major world power in the 21st century.²³ Recently, the relationship between these two countries assumed an important strategic dimension, including offers of civilian nuclear assistance to India (still to be realised), increased participation in exercises and greater access to sophisticated US weapon systems. For example, the US manufacturers Boeing and Lockheed Martin will contest the Indian multi-role combat aircraft tender with, respectively, the F/A-18 E/F Super Hornet and F-16 IN fighter aircraft.

India will not simply become an extension of US power, and will have its own ideas on the future of Indian military power and alignment.

Some sticking points remain in the developing relationship between the United States and India. For example, the nuclear cooperation program may founder on US requirements for restrictions on the production of fissile material for weapons and restraint from

nuclear weapons tests. And the Russians will not give up their traditional markets in India without some serious marketing efforts that may include trade and other inducements. Most importantly, India will not simply become an extension of US power, and will have its own ideas on the future of Indian military power and alignment.

Cooperative activities

It is easy to slip into a discussion of military developments in Asia that is exclusively in terms of competition and friction. But that undersells the positive benefits that can accrue from a collective approach to regional security and the use of military power as a collective good. Exercises and the development of military to military relationships can build professionalism and reduce the possibility of misunderstandings and accidents. Cooperative approaches to policing and constabulary operations (such as anti-piracy or surveillance work) can make efficient use of shared resources.

The ASEAN states Indonesia, Malaysia and Singapore have developed a joint approach to maritime security in Southeast Asia to contain the threat of piracy and terrorism in the region.

Asia is making some steps towards increased levels of cooperative defence activity. Formal military agreements sometimes fail to materialise from negotiations, as was demonstrated last year when Indonesia and Singapore ‘indefinitely postponed’ the ratification of a defence cooperation agreement.²⁴ Nonetheless, there are some cooperative mechanisms being developed. The ASEAN states Indonesia, Malaysia and Singapore have developed a joint approach to maritime security in Southeast Asia,



In an excellent example of regional cooperation in the wake of the December 2004 Tsunami, the temporary control tower at Banda Aceh airport was given to Indonesia by the Singapore Military, while Royal Australian Air Force air traffic controllers and civilian Indonesian controllers worked side by side to oversee the movements of aircraft. Photo: Australian Department of Defence

particularly in the Strait of Malacca, to contain the threat of piracy and terrorism in the region. The collective effort has involved coordinated patrols and the sharing of information between the participating countries. The benefit has been measurable, as there was a significant decrease in attacks in Southeast Asia in the first half of 2007.²⁵

In North Asia, there are signs that some of the historical enmities are being overcome. South Korea and Japan are developing an agreement of defence cooperation that would have seemed highly improbable a decade ago. The two countries have agreed to exchange military personnel and to cooperate on search and rescue and humanitarian operations. For the latter, both countries will have large amphibious ships that will be able to deliver assistance and large quantities of food and medical supplies. Australia's amphibious ships will be able to play a similar role, and the total capability of the region to provide assistance in the case of a widespread natural disaster will be impressive.

But there is also a need to ensure that the operation of new military capabilities by inexperienced states does not lead to misunderstandings or accidents. For example, we noted earlier that conventional submarines are being acquired for the first time by countries around the region. By their very nature, submarine operations are sensitive and have the potential to be quite provocative, especially when employed in clandestine intelligence gathering operations. Submarines must practice 'shadowing' surface vessels, which by definition places them in the same area as other vessels where they can be involved in collisions or near misses with shipping. Some of the narrow waters of the region are shallow (which causes submarines to operate near the surface) and also very heavily used by commercial shipping, raising the possibility of an accident.

Implications for Australia

The regional environment that Australia will face in the future is much more complex than it has been in the recent past. Close to home we are faced with increasing numbers of sophisticated warships and combat aircraft. Further afield, middle powers are developing similar capabilities to our own, and are often fielding them in greater numbers. And the great power relationships of the region are shifting after fifty years of stability that suited us very well.

The great power relationships of the region are shifting after fifty years of stability that suited Australia very well.

But we should not lose perspective here. The increased stability and prosperity of our Southeast Asian neighbours that has allowed their military modernisation is very much a positive. Since World War II, the period of greatest strategic concern for Australia was during the Indonesian confrontation in the mid-1960s. The Menzies government made some far-reaching force structure decisions at that time, buying the *Oberon* class submarines as well as long range strike aircraft (although the F-111 was not delivered until the 1970s) and guided missile destroyers—capabilities now in the process of being replaced by their modern equivalents.

In the mid 1960s it was possible for Australia to buy hardware and capability that overmatched anything in the region. Our economic advantage meant that we could afford state of the art equipment that was beyond the reach of our neighbours. To an extent, that is still true today, but the gap has narrowed markedly and, if the current growth patterns continue, our advantage

will be further eroded. Access to advanced US technologies may keep us ahead of European and Russian sourced equipment, but the capability differential will narrow.

ADF Capability

The Defence White Paper currently in development will need to factor our narrowing capability advantage into its calculus. The force structure we aim for should be dictated by what we want the ADF to be able to do, and the environment it will have to operate in. The trends in Asia discussed in this paper are in the process of making the likely operating environment considerably more challenging. That will have implications for the force structure of the ADF that are worth understanding. Rather than simply perpetuating a force structure that has served us well for the last four decades, it may be time to think hard about change.

Rather than simply perpetuating a force structure that has served us well for the last four decades, it may be time to think hard about change.

The Defence White Paper is about matching resources to strategy. And that strategy is likely to contain requirements for the ADF that follow from some enduring considerations:

- the ability to defend Australia from direct attack, with particular emphasis on our air and sea approaches
- the ability to conduct combat operations in Southeast Asia, either alone or in coalition with other countries
- the ability to contribute meaningfully to coalition combat operations in more distant theatres
- the ability to conduct stabilisation operations in nearby countries
- other non-combat operations, including humanitarian assistance and disaster relief operations.

Broadly speaking, we want to be able to defeat attacks on our national interests where our resources allow and to help achieve strategic outcomes that are consonant with our interests. Some times that can be achieved by fielding sufficient forces to deter potential adversaries and dissuade them from the early use of force in times of tension. As well, possessing credible defence capabilities can reassure friends and allies and strengthen their resolve. But sometimes we may be called upon to fight—which is when having the right force structure matters most. So it is worth understanding how changing circumstances might impact on the ability of the ADF to fight and win.

For the time being, the biggest impact on the ADF's warfighting ability will be felt in our ability to make a meaningful contribution to coalition operations far from Australia. In air and maritime operations, the ADF is much better equipped to deal with likely scenarios close to home. Australia cannot be directly threatened, in the conventional military sense, by any Southeast Asian state. Our air and maritime capabilities would ensure that any threat would be dealt with in our air-sea approaches. While our near neighbours are acquiring newer and more sophisticated capabilities, the ability to project power across the air-sea gap to the north of Australia and defeat the ADF (which would be operating with all of the advantages of a defensive posture and proximity to bases) will remain well beyond them for decades at least.

Ironically, the most contentious of capabilities—the Royal Australian Air Force's (RAAF) air combat force—is actually very well

placed to meet any regional challenge. The air forces of Southeast Asia are likely to remain modest in size and will not have the full suite of support capabilities in the form of air-to-air refuelling, electronic warfare self-protection and attack systems and airborne early warning aircraft that the RAAF will have. (The exception is the Republic of Singapore Air Force, which will be very capable, but is not a likely adversary for Australia.) The *Super Hornet* will provide a substantial capability jump over the current Hornet and (except for range) F-111. While developments in the systems and weapons fitted to regional aircraft such as the Sukhoi *Flanker* family have the potential to erode the *Super Hornet*'s advantage over time, Australia will have breathing space for the later acquisition of the Joint Strike Fighter (JSF). If the 'worst case' scenarios of *Flanker* developments actually come to pass, the fifth generation capabilities of the JSF would maintain Australia's capability edge against those fourth generation aircraft. The *Super Hornet* and the JSF would provide a valuable contribution to coalition operations further from home and would plug seamlessly into US command and control systems.

... we should not have any expectation of being able to unilaterally defend Australia against a major power.

Our naval forces do not have such a clear-cut advantage against the navies of Southeast Asia. With the air defence upgrades to the ANZAC frigates and FFGs and, in the future, Air Warfare Destroyers (AWDs), Australian surface fleets should be able to operate against regional air threats with reasonable expectations of survivability. With an embarked helicopter, Royal Australian Navy (RAN) surface combatants currently have the capability to target and strike other surface

units over the horizon.²⁶ But Australia has an Achilles heel below the water. As ASPI has reported before, the Anti-Submarine Warfare (ASW) capability of the ADF is currently in poor shape, meaning that the proliferation of capable submarines in the region has the potential to seriously affect the freedom of action of the RAN's surface fleet.²⁷

Even still, the ADF is well-placed to defend the continent against any regional power. However, we should not have any expectation of being able to unilaterally defend Australia against a major power. In 1942, Australia could not have successfully opposed a major Japanese operation directed towards Australia without the assistance of the United States. A similar conclusion holds today—if a major power could stage through the archipelago and capture or develop the bases and supply mechanisms required to support major operations, the ADF would not have the capacity to resist indefinitely. Our alliance with the United States will continue to be necessary if we are to contemplate defeating a threat from a major power. Of course, much would have to happen before that particular scenario came to pass. The chances are high that Australian forces would be committed to action in a theatre further away before the defence of the mainland became a major concern.

Any such commitment would most likely be as part of a coalition with the United States and/or other Asian countries. And that is just as well—Australia's ability to take a fight to a major power unilaterally is limited. The lack of fixed wing naval air power means that Australian aircraft would have to rely on forward basing and therefore almost automatically be involved in coalition operations. The size of the Army and the ADF's relatively small amphibious capability limits the ADF's ability to conduct operations away from Australia in any opposed scenario. (Even with the two new ships next

decade, the ADF will be able to deploy only 1,500 troops—about two thirds of a ‘hardened and networked’ Army battle group.)

The ability to contribute meaningfully to coalition operations is important. It sends a message to allies that we are prepared to shoulder part of the collective burden and, though it has not been an issue in recent conflicts, it is possible that a solid ADF contribution could make a difference in a finely-balanced conflict between larger powers. Some of the technologies being developed for area denial and for asymmetric attack by the rising powers of Asia should give us pause for thought about the capabilities we could bring to the fight.

It is possible that a solid ADF contribution could make a difference in a finely-balanced conflict between larger powers.

Two related developments that the ADF is not currently well-equipped to deal with are the proliferation of submarines throughout the region and the deployment of supersonic sea-skimming missiles by Russia, China and India. Both bring into question the survivability of surface vessels, especially when operating in small task groups. And while the Air Warfare Destroyers about to begin construction will provide a measure of protection against even the most sophisticated missiles, a simultaneous attack with multiple missiles (admittedly not easy to coordinate) has the potential to overwhelm the defences. Possible future deployments of terminally-guided ballistic missiles would only make the challenge of protecting surface fleets more difficult.

The ability of China in particular to conduct cyber attack and to target space-based capabilities also calls into question any

heavy reliance on networked capabilities. While networking can be a force multiplier in the right circumstances, it can also be a vulnerability—forces need to be able to act independently if their supporting networks are significantly disrupted.

There are good reasons to have the ability to strike targets at long range from home. It can have a deterrent effect during periods of tension and can tie up disproportionate adversary resources during times of conflict. That is true whether operating alone or in coalition, so strike capabilities should not be limited to the near neighbourhood of Southeast Asia, but should be able to operate in distant theatres as well. Currently, the one mechanism by which Australia can strike at a distant adversary with a good degree of survivability is through our submarines, although the size of the fleet and current lack of land strike capability are limiting factors in terms of impact. The difficulty of dealing with submarines is a double edged sword. ASW is as difficult for possible adversaries as it is for the ADF and its allies.

To be more effective in combat operations in the future, Australia’s force structure should shift in the following directions:

- away from major surface vessels as the major naval capability and towards a larger fleet of submarines that have anti-shipping and land strike capabilities
- surface vessels should have much better capability in the anti-submarine warfare role and an improved over-the horizon anti-shipping capability via their embarked helicopters.

There is no reference to land operations in the above discussion. That is because Army has little role in the defence of Australia, at least as far as defeating an adversary in the air and maritime approaches is concerned. It does however have a significant role to play in combat operations elsewhere, as has

been demonstrated numerous times in the past. Today the most valuable contribution we make to coalition operations in many circumstances is through the deployment of Special Forces and other high-demand units (such as combat engineers). Australian land forces are also often called upon for stabilisation and service-assisted evacuation operations and for disaster relief and humanitarian operations.

However, Army is not currently structured around this two-tiered set of requirements. The traditional combined arms approach of infantry, armour and artillery is less relevant for near-region stabilisation and assistance missions and has not proven to be required in recent coalition operations. A restructure of Army that focused on developing more Special Forces for deployment to war zones in coalition activities and other units for regional missions with less potential for combat would seem better suited to the likely missions to be faced in the future. Such a structure would mean that Australian land forces would be less able to make conventional contributions to a general land war, such as might be envisaged on the Korean Peninsula. And Australia's ability to conduct land operations in the near region—such as operations to deny the use of forward bases to a would-be adversary or against border incursions—would also be circumscribed. However, such operations could only be safely conducted with air cover, which could arguably counter the development of adverse events that might demand a land-based capability anyway.

Applying similar reasoning to the means by which deployments are made brings into question the value of investing several billion dollars in two large amphibious ships. While they offer a substantial capability to conduct stabilisation and humanitarian operations and could prove valuable in service-protected evacuations, it is hard to envisage opposed

operations in which the embarked forces could be decisive. That limited capability comes at a significant opportunity cost in the Defence Capability Plan and has the potential to further erode the funds available for other projects if costs increase over the lifetime of the project. Given the less demanding requirements of likely regional deployments, much cheaper ships based on civilian designs might have offered a more cost-effective solution.

Major power engagement

Emerging shifts in great power relations will pose challenges for Australia. The end state of World War II in the Asia-Pacific area, with a culturally similar Western nation in the ascendancy, was very much to Australia's advantage. Today we are firmly allied with the United States, but also have strong economic relationships with established and rising powers. China and India will have a much greater role to play in the coming decades, and Australia has to find a path through the jostling for position that is likely to occur.

Were great power relations in the Asia Pacific to deteriorate, there is the potential for our alliance with the United States to embroil us in periods of tension or even conflict.

Our alliance with the United States has been a cornerstone of defence policy for decades. That position is likely to continue, but it carries some risks as well as benefits. Were great power relations in the Asia Pacific to deteriorate, there is the potential for our alliance with the United States to embroil us in periods of tension or even conflict. Of course, Australia has a clear interest in the balance of power in Asia, and we may well find our interests strongly aligned with those

of the United States. But we might sometimes reach different judgements on the best way to engage rising powers and shape our policies accordingly.

For example, Australia maintained a firmly cooperative approach to China for many years, while the United States has leaned more towards strategies developed to hedge against growing Chinese military power. In the last few years of the Howard government, the balance of Australia's approach shifted noticeably towards the hedging end of the spectrum, embracing rhetoric couched in terms of an 'alliance of democracies', participating in missile defence developments and formalising security arrangements that could be interpreted as an attempt to isolate non-democratic China.

A strategy of containment of China will become increasingly difficult to sustain as Chinese power continues to grow and there are indications that the Rudd government will take a different tack to its predecessor. We should capitalise on China's need for the region to remain stable for the sake of its own economic development to involve it in developing regional security mechanisms. While it is natural to begin with second-order issues such as anti-piracy and constabulary operations, in time we may aim for a cooperative approach to first-order security issues.

As a robust democracy, India is relatively transparent about its intentions. A response to the rise of India will, in many ways, be easier to coordinate with allies. While there will still be issues on which we will differ, such as the export of nuclear material and technology, the approach of Western countries to India will be generally welcoming and cooperative, with little by way of hedging. In fact, the most likely source of friction will be Indian aloofness and reluctance to align itself to the degree that the United States would like.

Minor power engagement

Although our views and actions will matter, Australia will not have a central role in the development of major power relationships in Asia. But we can play a more important role in assisting the smaller regional powers to become part of a shared security architecture. In particular, encouraging the development of professionalism in ASEAN countries is in our interest. And, as the example of the cooperative approach between Indonesia, Malaysia and Singapore on surveillance and counter-piracy shows, the pooled resources of several countries can be effective in dealing with shared security problems.

The growing resources of ASEAN nations is not simply going towards major equipment purchases, but also towards re-focusing military training and postures away from internal security operations and towards external defence of sovereignty. This is occurring in a period of low levels of inter-state tensions and rivalry, which provides a window of opportunity for encouraging collective behaviour and for setting up mechanisms by which future tensions can be managed.

There is scope for Australia to help develop protocols and agreements to minimise the possibility of accidents and misunderstandings which could cause friction.

Regional countries have seen some of the benefits that can accrue from cooperative approaches. Australia has also provided mentoring for regional militaries on the appropriate division of responsibility between military and constabulary forces. And the military capabilities of region have provided valuable assistance in humanitarian crises. As regional militaries increase their capability

to conduct external security operations, opportunities to conduct cooperative activities will also increase, and we should continue to help develop our neighbour's capabilities. Such measures are relatively inexpensive, and some may even have a net positive return, as collective efforts reduce the rates of effort required from each participating country.

Finally, there is scope for Australia, as an experienced operator of high-end military equipment, to help develop protocols and agreements to minimise the possibility of accidents and misunderstandings which could cause friction. A good starting point might be a collective regional agreement on protocols to be followed when ships, submarines and aircraft interact on or over (or below) the high seas.

Endnotes

- 1 *Asian economic growth prospects and the impact on Australia—address to the leading Australia's future in Asia (LAFIA) program*, Australian National University, 18 May 2006, by Martin Parkinson, Gordon de Brouwer, Nathan Dal Bon, Milovan Lucich and Hassan Noura, Macroeconomic Group, the Treasury. <http://www.treasury.gov.au/documents/1115/PDF/lafia.pdf>
- 2 These figures are from *Defence Economic Trends in the Asia Pacific 2007*, Defence Intelligence Organisation, available at http://www.defence.gov.au/dio/documents/2007_DET.pdf. DIO's methodology involves a set of defence deflators for each country and historical exchange rates that make it difficult to express figures in contemporary dollars, so we have used their 2000 US dollar figures. The use of country-specific deflators also means that the DIO figures may not match other published sources.



Republic of Korea Destroyer Yi SunShin participating in the exercise Rim of the Pacific (RIMPAC) 2004. Many regional states participate in this annual exercise, including Australia, Japan, South Korea and the United States. Photo: US Navy

- 3 *Military Power of the People's Republic of China 2008*, Office of the Secretary of Defense, p32. <http://www.defenselink.mil/pubs/china.html>
- 4 For example, US Defense Secretary Gates made such a claim recently: <http://www.latimes.com/news/nationworld/washingtondc/la-fg-gates31-2008may31,0,3853010.story>
- 5 The other plausible driver of Indian military spending is Pakistan. However, over the last decade Pakistani spending has increased only modestly, and has actually decreased in GDP terms.
- 6 *The Enemy Below—anti-submarine capability in the ADF*, March 2007. Available for free download at http://www.aspi.org.au/publications/publication_details.aspx?ContentID=116
- 7 'Singapore Airshow 2008: Asia-Pacific market remains platform-based, says industry', *Jane's Defence Weekly*, 21 Feb 2008.
- 8 While reports vary as to the status of the Indonesian requirement (in terms of firm orders versus stated wishes), the most commonly quoted figures are four *Kilo*-class and two *Amur*-class boats.
- 9 Indonesia and Malaysia fall squarely into this category, but insurgency continues to be a distraction for The Philippines and Thailand.
- 10 A useful data set showing ASEAN military strength in 1974 and 1998 is included in the publication *Force Modernisation Trends in Southeast Asia*, by Andrew Tan, Institute of Defence and Strategic Studies, Singapore, 2004.
- 11 'U.S. Is Selling Missiles It Once Banned', by Raymond Bonner, *New York Times*, 23 January, 1997.
- 12 One of the reasons cited by Malaysia for turning to Russian aircraft in preference to US aircraft was the willingness of the Russians to sell beyond visual range air-to-air missiles into the region, though trade deals associated with the arms purchases also played a major role.
- 13 Reports of the capabilities of China's long-range submarine fleet should be tempered by the recent release of US Navy analysis that shows that the long-range submarine capability of the PLA(N) is very much a work in progress: http://www.fas.org/blog/ssp/2008/01/chinese_submarine_patrols_rebo.php
- 14 China has purchased a number of carriers from Russia (and one from Australia) in the past and some trials of deck landings were reportedly conducted. However, apart from presumed technical inspection of the vessels by Chinese naval architects, none of them have ever constituted a Chinese capability. See the excellent discussion at <http://www.globalsecurity.org/military/library/report/2004/art6-wo4.htm>
- 15 'Reflecting Change: 2007 Annual Defence Report', *Jane's Defence Weekly*, 26 Dec 2007.
- 16 See the reference in note 3. Annual reports dating back to 2002 can be found at that address.
- 17 The United States House of Representatives Select Committee on U.S. National Security and Military/Commercial Concerns with the People's Republic of China, January 1999. <http://www.house.gov/coxreport/>
- 18 *The Military Balance 2008*, International Institute for Strategic Studies, p335.
- 19 Indian Ministry of Defence press releases: *India Acquires capability for air defence against incoming ballistic missile threats*, 17 November 2006, and *Antony asks DRDO and Armed Forces to work with greater synergy*, 3 June 2008. Available at <http://mod.nic.in>



Essential Advantage

At Booz & Company we work closely with our clients to create and deliver essential advantage in any situation. We bring unique foresight and knowledge, deep functional expertise, and a practical approach to building capabilities and delivering real impact.

This philosophy has been at the heart of our company since its formation in 1914. It's lived every day by more than 3,300 Booz & Company people across 57 offices in over 30 countries. And it's more relevant today than ever before.

From May 2008 we separated our operations from the U.S. government consulting business, which will continue as Booz Allen Hamilton.

We understand the special relationship between the Australian and U.S. defence and security communities and will continue to collaborate closely in areas of mutual interest.

For our Australian defence and security clients, this means we will continue to access the global Booz community to ensure we deliver world class expertise, global best practices and deep insight to our client's problems.

Booz & Company - a new name for the founders of the management consulting profession.

Visit www.booz.com.au to learn more.

- 20 'Hypersonic Brahmos undergoes successful lab test', *Deccan Herald*, 13 May, 2008. <http://www.deccanherald.com/Content/May132008/national2008051367703.asp?section=updatenews>
- 21 The US Pacific fleet has five aircraft carriers assigned to it. At the time of writing, two carriers were deployed to the Western Pacific region and one was participating in operations in the Middle East.
- 22 'Christopher to Meet His Chinese Counterpart', by Steven Erlanger, *New York Times*, 20 March 1996.
- 23 *Background Briefing by Administration Officials on US–South Asia Relations*, 25 March 2005, available at <http://www.state.gov/r/pa/prs/ps/2005/43853.htm>
- 24 'Indonesia and Singapore postpone co-operation treaty', *Jane's Defence Weekly*, 17 October 2007.
- 25 'Turning the tide: maritime security in Southeast Asia', *Jane's Defence Weekly*, 28 November 2007.
- 26 The helicopters currently in service cannot carry a missile themselves—the *Super Seasprite* was to address this shortfall with the *Penguin* anti-shipping missile.
- 27 See the ASPI report in note 6.

Acknowledgements

The author is grateful to ASPI Research Fellow Rupal Khosa for providing the material on India's military development programs and for his diligence in compiling the table of regional military strength. He also thanks Amy King for her contributions to the discussion of the rise of China.

Important disclaimer

This publication is designed to provide accurate and authoritative information in relation to the subject matter covered. It is provided with the understanding that the publisher is not engaged in rendering any form of professional or other advice or services. No person should rely on the contents of this publication without first obtaining advice from a qualified professional person.

About the author

Andrew Davies is the Director of the Operations and Capability program at ASPI. He has written on nuclear proliferation, defence acquisition programs and major Australian capability decisions, including the Air Warfare Destroyers, Joint Strike Fighter and Australia's future submarine.

About Strategic Insights

Strategic Insights are shorter studies intended to provide expert perspectives on topical policy issues. They reflect the personal views of the author(s), and do not in any way express or reflect the views of the Australian Government or represent the formal position of ASPI on any particular issue.

ASPI

Tel +61 2 6270 5100
Fax + 61 2 6273 9566
Email enquiries@aspi.org.au
Web www.aspi.org.au

© The Australian Strategic Policy Institute Limited 2008

This publication is subject to copyright. Except as permitted under the *Copyright Act* 1968, no part of it may in any form or by any means (electronic, mechanical, microcopying, photocopying, recording or otherwise) be reproduced, stored in a retrieval system or transmitted without prior written permission. Enquiries should be addressed to the publishers.