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### **KEY FINDINGS**

Beijing's maritime and aerospace capabilities will have serious implications in the event of an Indo-Pacific power play.

- China's recent military development constitutes the greatest expansion of maritime and aerospace power in generations and is most obviously seen in its expanding long-range missile force, bomber force, and modernising blue-water navy.
- While Australia's defence interests and territorial integrity are largely unthreatened for now, a future Indo-Pacific dominated by China would present a grave possibility of military coercion by the Chinese People's Liberation Army.
- The prospect of Chinese military action against Australia remains remote. But China has the military and industrial potential to field a long-range power projection capacity that would dwarf anything Japan threatened Australia with during the Second World War.

### **EXECUTIVE SUMMARY**

As the international scope of China's economic interests has expanded over time, China's strategic horizons have broadened correspondingly, and so have its military capabilities. China is engaged in the largest and most rapid expansion of maritime and aerospace power in generations. Based on its scope, scale, and the specific capabilities being developed, this buildup appears to be designed to, first, threaten the United States with ejection from the western Pacific, and then to achieve dominance in the Indo-Pacific.

Assuming ongoing US involvement and support, the People's Liberation Army (PLA) is unlikely to be able to seriously threaten the environment in Australia's immediate region, nor Australia's sovereignty, in the immediate future. Absent assistance from allies and partners, China already possesses the capability to strike Australia from existing bases with bomber aircraft and long-range missiles. The expected introduction of additional PLA air and naval capabilities over time will worsen this asymmetry.

The prospect of Chinese military action against Australia remains remote. But defence policy operates in the realm of low-probability, high-consequence events. And the sheer ability of the PLA to take such extreme steps places pressure on decision-makers whose actions are weighted with the fear that force *might* be used against them.

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force against the

Australian landmass.

### INTRODUCTION

Four thousand kilometres — the rough distance between Australia and the nearest point on mainland China — sounds like a long way, and until fairly recently it was. As a result of the wide moat of the Pacific Ocean, the PLA has historically been something that most Australians could safely ignore. Protected by distance and by its alliance with the greatest naval power in history, Australia's vital interests or territorial integrity have never been threatened by the PLA. But that situation is changing. The PLA is rapidly growing from a local military force to a rising global power. In fact, the PLA is on track to gain the ability to threaten Australia's access to international markets and energy sources and thus obtain direct coercive power over Australia's economic wellbeing.

The PLA is also developing the military capability to put at risk Australia's territorial integrity. Not since the Second World War has any great power, other than the United States, had the capability to project significant military force against the Australian landmass. Of course, the Soviet Union could have, in extremis, landed nuclear-tipped intercontinental missiles on Australian territory. But Soviet conventional capability was never so far-reaching; even at the Soviet Union's peak as a military power, it lacked the capability to hit Australia with more than a handful of cruise missiles fired from long-range aircraft or submarines.

So, when Australia now thinks about how to defend its territory, it confronts a qualitatively different problem to the Cold War, when Australia knew the Soviet Union would need years, decades even, to build the capability to threaten Australia. The PLA already has more non-nuclear long-range strike capability with the range to hit Australia than the Soviet Union ever did. This paper examines that capability and looks at its likely further expansion.

Why does this matter, since China is not Australia's enemy? This paper makes no claims about specific Chinese intent against Australia. But China's intent is too unpredictable and changeable to serve as a basis for defence planning. Australia must plan on the basis of capability. Will China seek to become the dominant military power in Asia, pushing the United States out of the region? Again, this paper draws no conclusion on this critical question, other than to assume that it is a reasonable possibility, and that Australia ought to think about how to defend itself in those circumstances.

This paper will also not look at some of the more exotic and innovative ways China might project national power against Australia, whether that is with nuclear weapons or cyber power or para-military maritime forces, which are so active in the South China Sea. The sole intent is to bring clarity to the central problem faced by Australian governments and planners: what is China's ability to threaten Australia militarily, and how is that capability likely to grow?

# THE DEVELOPMENT OF CHINESE MILITARY POWER

## The intertwining nature of China's economic opening and strategic development

Over the last several decades, the world has observed the meteoric rise of Chinese economic power, following the 'opening up' of its economy in the late 1970s. While the economic empowerment and engagement of China has lifted hundreds of millions of people out of poverty, and benefited consumers of Chinese-produced goods worldwide, it has also led to historic improvements in Chinese military, and especially naval, power. This process has not been simply a matter of China having additional funds available for military purchases, and then spending them accordingly. Rather, it has been a self-reinforcing cycle where the growing array of Chinese overseas economic interests and investments has driven increased Chinese perceptions of insecurity - on top of historical grievances and long-simmering tensions related to sovereignty and territorial issues in places such as Taiwan, the Senkaku Islands, and the South China Sea. This feeling of insecurity is most clearly illustrated in what was described by former Chinese president Hu Jintao in 2003 as China's "Malacca dilemma", a recognition that China's energy supplies could be interdicted by hostile foreign nations in strategic locations such as the Strait of Malacca. Prior to China's industrial development, no such dilemma existed. But as China's economy continues to grow and become ever more dependent on access to overseas resources and markets, this feeling of insecurity, as well as the resulting appetite for the military means to reduce it,

Before this process of economic growth and military modernisation began, the PLA had essentially no ability to directly harm Australia's vital national interests or territorial integrity. While the PLA possessed one of the world's largest ground forces, it had little ability to project power outside the country's borders. At sea, early PLA Navy (PLAN) doctrine was focused on coastal defense, with no real ability to interdict Australia's sea lines of communication (SLOCs). The PLA Air Force (PLAAF) had no forward bases, no air-refuelling capability, and very limited standoff missile capability. China's land-based missile forces — known today as the PLA Rocket Force (PLARF) — consisted of small numbers of long-range nuclear-armed missiles, as well as conventional ballistic missiles too inaccurate to hit anything but cities.

continues to grow.

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As the international scope of China's economic interests has expanded, China's strategic horizons have broadened correspondingly. Following China's economic opening, the mid-1980s saw the first transformation of the PRC's naval strategy under Admiral Liu Huaqing, from its traditional coastal defence mission to one of "offshore defence" of China's near seas — that is, out to the First Island Chain, which runs from Malaysia up through Indonesia, the Philippines, and Japan.<sup>2</sup> China's leaders established a timeline with three broader goals for the PLAN: by 2000, developing forces sufficient to exert control over the sea regions within the First Island Chain; by 2020, extending control out to the Second Island Chain, running from Papua New Guinea up through the Mariana Islands to northern Japan; and by 2050, to develop a truly global navy.<sup>3</sup>



On 23 April this year, Chinese President Xi Jinping showed off the PLA Navy's production capacity by commissioning at a single ceremony the Hainan amphibious assault ship, the Changzheng-18 nuclear-powered ballistic missile submarine, and the Dalian destroyer. Image: Li Gang/Xinhua via Getty Images.

In 2004, President Hu provided a further update to the PLA's guidance with a declaration of "New Historic Missions" that broadened the PLA's goals to encompass "far seas defence", covering seas past the First Island Chain and out into the open Pacific Ocean and beyond. The PRC's 2015 Defence White Paper explicitly included defence of overseas interests and strategic SLOCs in its goals, to be accomplished by the added mission of "open seas protection", signalling a need to be able to project maritime power wherever China's interests lie. The 2019 Defence White Paper continued this theme, declaring a need to develop "far seas forces", overseas basing facilities (a previously-disavowed practice for China), and enhanced "capabilities in

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accomplishing diversified military tasks".<sup>5</sup> As outgoing PLAN chief, Admiral Wu Shengli stated upon his departure from office in 2017, "wherever the scope of the nation's interests extends, that is where the perimeter of our combat development will reach".<sup>6</sup>

China's desire to protect its overseas interests and defend its SLOCs might be regarded as anodyne; after all, such an objective on the part of other nations would raise little alarm. But this is largely because, in almost all cases, those nations lack the ability to defend their SLOCs on a global basis. China appears to have the motivation, maritime industrial might, and resolve to give its words an entirely different meaning: a stated strategy that, if actualised, would take the form of military — and especially maritime — capability of a scale that many Western observers are yet to fully comprehend.

In terms of the facilities necessary to underwrite expanding Chinese power projection and sea control across the Indo-Pacific, we can already see that China has been engaged in a massive campaign to build air and maritime facilities spanning the region, mostly under the banner of the Belt and Road Initiative (BRI). Ostensibly an effort focused on economic development, many of its resulting projects fall in highly strategically useful places, and are often of an un-economic nature (see the huge port facility and nearby airfield built at Hambantota, Sri Lanka;<sup>7</sup> or the under-utilised<sup>8</sup> but still expanding port facility at Gwadar, Pakistan9). One should consider also China's now well-publicised and explicit policy of "military-civil fusion", wherein state-owned enterprises (SOEs) are required by Chinese law to "provide necessary support and assistance to national security bodies, public security bodies, and relevant military bodies". 10 This concept brings into a new light construction in locations such as Cambodia's Ream Beach, 11 as well as Papua New Guinea's Manus Island, 12 in the strategic approaches to the Antipodes.

As for China's claims of the peaceful and civilian nature of facilities it is building overseas, one should keep in mind President Xi Jinping's personal pledge, delivered directly to President Barack Obama in the White House Rose Garden, that China would not militarise the South China Sea. That same South China Sea is now dominated by <a href="https://example.com/huge-artificial-islands">huge artificial-islands</a><sup>13</sup> that bristle with Chinese missiles, and which constitute just the first of what it likely to be a series of strong points positioned to help establish Chinese control over its critical SLOCs.

## Manifestations of the development of Chinese military power

Some observers assert that China's growing military power is a "banal reality" intended to "defend against perceived threats in its offshore waters, as any country would do". He but were China building a military truly focused on largely defensive objectives, one would expect to see an emphasis on smaller escort ships, coastal defence missiles, fighter aircraft, and the like. Instead, China has engaged in the largest and most rapid expansion of maritime and aerospace power in generations. Based on its scope, scale, and specific capabilities, this buildup appears designed foremost to threaten the United States with ejection from the western Pacific, and thereafter to achieve domination in the Indo-Pacific.

Some of the most obvious manifestations that China's military development is not defensive in nature can be seen in three specific areas: the deployment by the PLARF of huge numbers of long-range conventional ballistic missiles; a major expansion of the capabilities of China's long-range bomber force; and the explosive growth of China's blue-water navy.

CHINA'S BALLISTIC MISSILE FORCE

Probably the most well-known element of this buildup is the huge arsenal of highly accurate conventionally-armed ballistic missiles fielded by the PLARF. Already by far the world's largest, this force continues to grow at a rate that only makes sense for the purpose of severely threatening US and allied capabilities in the western Pacific. This is most apparent in China's force of DF-26 intermediate-range ballistic missiles (IRBMs) — arguably one of the crown jewels of the Chinese military.

The US government's 2020 Military and Security Developments Involving the People's Republic of China publication reported an apparent more-than-doubling in a single year of China's inventory of DF-26 IRBM launchers. <sup>15</sup> This growth is a continuation of previous trends: the 2018 report had listed "16–30" launchers, then 80 in the 2019 report, <sup>16</sup> and now 200 in the 2020 report. In terms of available missile inventory for those launchers, the report only lists "200+" as the estimated number. We know from Chinese television footage that DF-26 units practice reloading missiles routinely, and that the missiles have different warhead types that are swappable. <sup>17</sup> Thus, if each of the 200-odd launchers had only one reload missile available (and there may well be more than that), this would mean an IRBM force of more than 400

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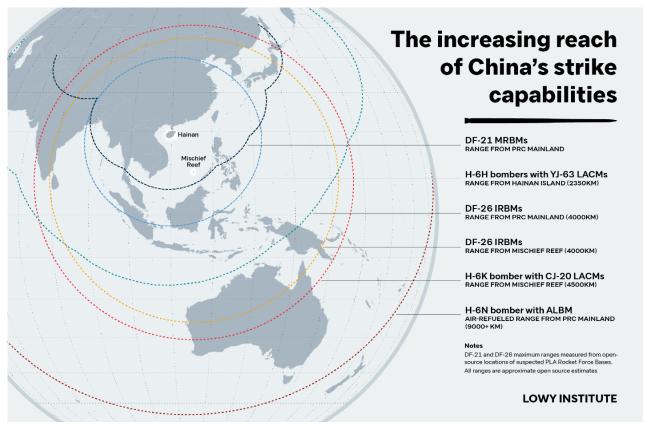
missiles, nearly all configurable to anti-ship or land-attack missions, in addition to the PLARF's hundreds of <u>increasingly capable</u> ground-launched cruise missiles.<sup>18</sup>



A 2020 US government report on China's military and security developments states that Beijing appears to have more than doubled in a single year its inventory of DF-26 intermediate-range ballistic missile launchers. In 2015, China showed off its weaponry at a military parade to commemorate the end of the Second World War. Image: The Asahi Shimbun via Getty Images.

Going from dozens of medium-range missiles to perhaps hundreds of much longer-range ones will drive changes to the balance of air and maritime power in the western Pacific on a number of different levels — and with the DF-26's long range, in the Indian Ocean and Persian Gulf, too (see Figure 1).

First, the number of available anti-ship ballistic missiles (ASBMs) could broaden the PLARF's anti-ship mission from what has been thought of as a 'carrier-killer' role to a more generic 'ship-killer' mission, for use not just against the United States, but potentially Australia's surface ships as well. China itself <u>describes</u> the DF-26 as capable against large and medium-size ships. <sup>19</sup> Without doubt, in a war at sea the PLA, if it had the inventory to do so, would be perfectly happy to trade a missile (or several), costing perhaps in the order of US\$20 million each, <sup>20</sup> for a destroyer that would cost billions to replace.



**Figure 1:** A move by China's PLA from medium-range to long-range missiles will change the reach and balance of air and maritime power in the western Pacific.

Another way in which a DF-26-equipped PLARF could change things would be through the specific additional areas that it could strike (see Figure 1). In the Philippine Sea, areas of relative sanctuary beyond the range of the older and shorter-range DF-21 medium-range ballistic missile (MRBM) lie well within range of the DF-26. US and allied defence thinkers previously posited the <u>ability to operate forces reasonably safely</u> outside the First Island Chain as a means to enable episodic operations within that chain, but the risk of such operations is now considerably higher.<sup>21</sup>

While some commentators have expressed incredulity that China's IRBM force could have grown so quickly, 22 missile launchers of this size are distinct physical objects that can be counted from space, so US intelligence community assessments are much more than just inference or guesswork. And while perhaps these IRBM launchers are not fully integrated into effective combat units yet, that is just a matter of time. Other observers may have doubted that China's ASBMs really have the ability to strike moving targets at sea, but the commander of US forces in the Indo-Pacific recently confirmed that China's missiles

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did, in fact, strike moving ship targets during a recent exercise.<sup>23</sup> Likewise, for the second year in a row, <u>China has launched ASBMs</u> into the South China Sea as part of an open ocean exercise for all to see.<sup>24</sup> Of note, China appears to be building a major <u>ballistic missile base</u> on Hainan Island, bordering the South China Sea.<sup>25</sup> Given that China could already completely overwhelm any of its regional competitors' military forces with the rest of the PLA's forces, it seems likely that this ballistic missile base is being built to threaten US aircraft carriers operating in that region in support of its allies and partners.

The threat is by no means restricted to ships. In 2017, a colleague and I at the Center for a New American Security <u>estimated</u> that a pre-emptive Chinese missile strike on US bases in Asia could crater every runway and runway-length taxiway at every major US air base in Japan, and destroy more than 200 aircraft on the ground. We also estimated that, in addition to shorter-range missiles, an inventory of approximately 60 DF-21 MRBMs would be necessary to conduct such a strike. Considering the National Air and Space Intelligence Center's recent estimate that China now possesses "approximately 350" medium and intermediate-range ballistic missile launchers, the threat appears to have become graver than we estimated at that time.

To be sure, the PLA's missile forces are not invincible or unstoppable. While the details are likely to remain classified, the United States is surely working to develop "left of launch" measures to dazzle, decoy, or destroy China's reconnaissance satellites, as well as to jam their missiles' seekers if they do manage to launch. One can also imagine robust efforts to disrupt, whether via kinetic means or otherwise, the links and nodes in China's command and control networks that would be necessary to transmit targeting information from its sensor networks to its missile units. China's other reconnaissance platforms, whether in the air, on or under the sea, or on land, would also be prime targets for US and allied strike capabilities. The combination of these efforts would mitigate, hopefully to a significant degree, the threat of China's long-range missiles.

While China's missile force does not currently appear to possess the range to threaten Australian bases directly from the Chinese mainland, if China were to deploy its IRBMs from its South China Sea island bases, that might no longer be true. Additionally, with the ongoing development of future weapon systems — such as hypersonic glide vehicles or the potential development of precise conventional intercontinental-range missiles — there is no clear obstacle to China developing missiles that *could* strike Australia from its mainland.

Certainly, the clear trend over time has been China's development of precise missiles with ever-greater range, with no clear endpoint in sight.

#### CHINA'S LONG-RANGE BOMBER FORCE

In addition to its missile force, in recent years China has dramatically increased the capability of its fleet of long-range strike aircraft. China has the world's only operating bomber production line, which has been producing brand-new, long-range aircraft seemingly purpose-built<sup>29</sup> to strike US and allied bases, and to overwhelm US and allied carrier strike groups on the high seas.<sup>30</sup>

Before the last decade, China's bomber force had fairly limited capabilities. The Xi'an Aircraft Company's H-6, a dated copy of the Soviet-era Tupolev Tu-16, only carried a small number of rudimentary missiles and could deliver them to a limited range. This began to change in 2009 with the introduction of the H-6K, a major redesign and update of the basic airframe. Equipped with completely new engines and avionics, the H-6K enjoys a much longer combat radius (about 3500 kilometres) and is capable of carrying six missiles compared to two in previous versions.<sup>31</sup>



The Xian H-6K strategic bomber enjoys a much longer combat radius than its predecessor and is capable of carrying six missiles compared to two in previous versions. Image: Wikimedia commons.

Incorporating the improvements provided by the PLAAF's H-6K, the PLAN has since gained its own maritime strike-focused version of the aircraft — the H-6J. First seen in 2018, the H-6J is capable of carrying six <u>YJ-12</u> long-range supersonic anti-ship cruise missiles.<sup>32</sup> More recently, China revealed the development of a new model, the H-6N,

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Figure 1 shows such a progression of capability relative to the Australian continent, with China's older H-6H model unable to reach Australian targets at all; today's H-6K able to reach northwest Australia if dispatched from China's bases in the South China Sea; and eventually China's air-refuellable H-6N able to strike anywhere in Australia from bases in mainland China. While we are yet to see military aircraft permanently based at China's artificial island bases, the <u>facilities built on them</u> — long runways, large aircraft hangars, and acres of hardened fuel tanks<sup>34</sup> — appear well-suited to support operations by larger aircraft such as China's bomber fleet.

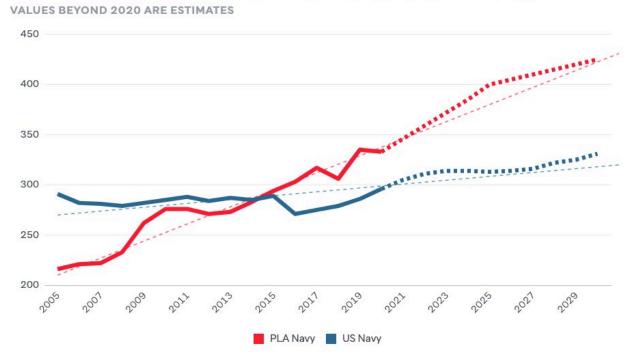
It is important to note that China is not merely replacing older bombers with improved ones; it appears to be growing the size of the force as well. Prior to the introduction of the H-6K, most estimates were that China's H-6 inventory was in the <u>mid-to-low 100s</u>. In order to determine the approximate size of China's bomber force over the last several years, the author conducted two surveys of available commercial satellite imagery, using open-source lists of Chinese bomber bases. These counts, which did not include any aircraft in flight, in hangars, deployed to secondary airfields, or otherwise missing from imagery, produced results of just over 200 aircraft in 2018, and more than 230 in 2020.

### CHINA AS A MARITIME WORLD POWER

In recent decades, China has grown to become the world's premier sea power by most measures. China already holds first place in the size of its fishing, merchant shipping, and maritime law enforcement fleets. <sup>36</sup> China's shipbuilding industry dwarfs that of the United States, building <u>38 million tons</u> of shipping in 2020 compared to just over 70 000 tons from American yards. <sup>37</sup> The same is true in maritime law enforcement, with China building coast guard cutters and "maritime safety" vessels weighing <u>over 10 000 tons</u> — larger even than the latest Western destroyers. <sup>38</sup> China's fishing fleet, also the world's largest, is depleting fish stocks worldwide. <sup>39</sup> In the vanguard of the fishing fleet is a force of government-subsidised and directed maritime militia (with vessels <u>specifically constructed to ram</u> others) <sup>40</sup> that harass and intimidate other nations' commercial vessels, with Chinese naval vessels lurking over the horizon.

It is only in the realm of hard naval power that the United States has retained superiority, though the trend lines even there are distinctly negative. In recent years, the PLAN has been engaged in a naval buildup the likes of which has not been seen since the United States' "600-ship Navy" effort of the 1980s. 41 As an example, during the five years of 1982-1986, the US Navy procured 86 warships; 42 over the years 2016-2020, China appears to have launched almost as many (80, compared to the mere 36 that the US Navy launched over the same years). As a predictable result, the US Department of Defense recently assessed that China's Navy is now the "largest navy in the world"43 in terms of the sheer number of ships (see Figure 2).44 Chinese shipyards have been seen churning out huge numbers of warships, including aircraft carriers, 45 state-of-the-art multi-mission destroyers, and cruisers that are the world's largest current-production surface combatants. China has also been constructing modern at-sea replenishment ships and huge amphibious assault ships<sup>46</sup> to carry China's rapidly-expanding Marine Corps.<sup>47</sup>

### Total battle force ships, US Navy and Chinese PLA Navy



**Figure 2:** The US Department of Defense "Battle Force 2045" plan would rebalance its fleet away from larger ships, such as aircraft carriers and cruisers, to more numerous but smaller and cheaper vessels.

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The naval buildup has been visible, and quite obvious, in freely-available satellite imagery or even in pictures taken from passing airliners. Recently, China showed off this production capacity by commissioning — at a single ceremony — a new amphibious assault ship, a nuclear-powered ballistic missile submarine, and a destroyer. Given that there are ongoing or planned major expansions both at the primary shipyard that builds China's surface combatants and aircraft carriers, and at the one that builds its nuclear submarines, and aircraft carriers, and at the one that builds its nuclear submarines, and aircraft carriers, and at the one that builds its nuclear submarines, and aircraft carriers, and at the one that builds its nuclear submarines, and aircraft carriers, and at the one that builds its nuclear submarines, and aircraft carriers, and at the one that builds its nuclear submarines, and aircraft carriers, and aircraft carriers, and aircraft carriers, and at the one that builds its nuclear submarines, and aircraft carriers, and a destroyer.

Many commentators <u>have pointed out</u> that China's warships have been on average much smaller, and that the US Navy remains much larger in terms of its overall tonnage. <sup>53</sup> Assuming that combat power at sea has a somewhat comparable density among modern warships, <sup>54</sup> tonnage may indeed be a better measure than the number of hulls, but by that measure the trend lines are little better. By the author's calculations, from 2016–2020 China launched more than 600 000 tonnes of warships, almost 50 per cent more than the United States launched over the same period (see Figure 3). When one considers the fact that the US Navy has worldwide responsibilities, with only about 60 per cent of naval forces allocated to the Pacific Fleet, the story is clearly worse in terms of regional naval power. While the US Pacific Fleet is currently much larger than the PLAN by tonnage, the author's estimates indicate that, on current trend lines, the PLAN will reach near-parity on this basis in 15 to 20 years.

As other observers have pointed out, this fleet will indeed become a maintenance and crewing burden. However, the manning, training, and maintenance demands of a larger fleet are largely predictable ones that Chinese planners have probably already considered, and China's huge dual-purpose shipping industry should be well positioned to support fleet maintenance.

### Organisational and structural reforms

On top of these obvious material manifestations of the PLA's growing reach, China's military has also undergone comprehensive structural and personnel reforms in recent years that will further enable it to project power. Starting in 2015, China's military commenced major reforms in its organisation, 55 shifting from army-dominated Military Regions to joint Theatre Commands, forming a new PLA Ground Force headquarters, elevating China's missile forces to a full service co-equal with the other PLA branches, and establishing the PLA Strategic Support Force. In conjunction with major personnel reforms, which have been underway in recent years to improve the force's professionalism and readiness, 56 these efforts should enhance the year-round readiness of the PLA, and help transform the force into one "increasingly capable of conducting joint operations, fighting short, intensive and technologically sophisticated conflicts, and doing so farther from Chinese shores". 57

In summary, when one casts an eye over a Chinese military that includes an increasingly world-class and rapidly growing blue-water navy, the development of a large force of long-range strike aircraft, and an ever growing and highly threatening ballistic missile force, the impression is not of a defensive force intended only to uphold Chinese sovereignty and local interests, and to protect Chinese shipping against piracy. Rather, China's military appears like a force being developed to eventually have the capability to eject (or better yet, to merely stare down) the United States — and thereafter to dominate the security affairs of the western Pacific.

### WHAT CHINA'S MILITARY DEVELOPMENT MEANS TO AUSTRALIA

First, we must establish what Australia's security interests are — what it is that the PLA could threaten now and in the future.

Given the rapid pace of Chinese military development, any reasonable assessment of the PLA's threat to Australian national security should be placed on a sliding timeline, to assess where things stand now and where they appear to be heading. This assessment will start with the current state of affairs, and then look at where current trends and future events could plausibly take it in the future.

First, we must establish what Australia's security interests are — what it is that the PLA could threaten now and in the future. Australia's <u>2020 Strategic Update</u><sup>58</sup> sets three primary strategic objectives for defence planning:

- 1. Shaping Australia's strategic environment: being able to be an active and assertive advocate for stability, security, and sovereignty in Australia's immediate region.
- 2. Deterring actions against Australia's interests: being able to hold potential adversaries' forces and infrastructure at risk from a distance, influencing their calculus in threatening Australian interests. This objective also includes deterring coercive or greyzone activities that could escalate into conventional conflict, as well as preventing actions that undermine regional resilience and sovereignty provided by Australian Defence Force (ADF) presence and engagement.
- Responding with credible military force: being prepared to fight a
  high intensity conflict if deterrence measures fail, supporting the
  United States and other partners where Australia's national
  interests are threatened.

### Near term (next 5–8 years): Australia could be drawn into a localised conflict with China, but Australia and its most vital interests remain secure

While China already has a limited ability to strike some portions of Australia, for the next few years, the PLA will still lack the ability to significantly imperil Australia's vital national interests or territorial integrity. This is because, for the most part, Chinese military power remains hemmed inside the First Island Chain, with other adversaries to worry about before it could reach and assault Australia's vital interests at scale. To be sure, the potential for conflict in the next few years does exist. US-China relations have been on a downward trajectory for a number of years, and China has been growing ever more bellicose regarding what it considers its unresolved civil war with Taiwan. Likewise, the United States and China have had a number of tense encounters<sup>59</sup> in the contested South China Sea (contested, in this case, largely due to China's expansive and illegitimate 60 claims to the near-entirety of the islands and high seas within it), which in the future could provide opportunities for miscalculation to escalate into armed conflict. Tension with Japan over the Senkaku Islands continues to simmer, with a record number of incursions into Japanese territorial waters during 2020.61

Any hostilities against the PLA involving Australia would likely be to support like-minded Asian democratic partners and the United States. The arena of hostilities for any such conflict would be mostly confined to East Asia, with the possible exception of strikes against US forces using Darwin as a rear-area staging base. Due to the distance from China, any such strikes are likely to be limited in nature due to the sheer distance from China's main operating bases on the Chinese mainland. Involvement by Australian forces would probably be expeditionary in nature, with a focus on air and maritime forces contributing to the struggle to gain and maintain allied air and sea control over contested sea areas in the western Pacific. In such a conflict, the PLAN is unlikely to be able to seriously threaten the SLOCs connecting Australia to the rest of the world, as it would already have its hands full with US and allied air and sea power within the region.

Assuming ongoing US involvement and support, the PLA is unlikely to be able to seriously threaten the environment in Australia's immediate region, nor Australia's sovereignty; China's grey-zone capabilities will remain tied down for now in ongoing territorial disputes in China's near abroad. And Australia seems likely to be able to continue to contribute meaningfully to supporting the United States and other partners,

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whether via basing assistance or means such as deployments of air and naval assets.

In this nearer term, the most consequential means by which the PLA could imperil Australia's security interests would be to set in motion chains of causation that, further down the road, would imperil these interests. Were the PLA to engineer circumstances that led to the destruction, ejection, or withdrawal of US military power from the western Pacific, this would cause future changes to the balance of power in the region that could leave Australia and others open to coercion at the hands of the PLA.

### Longer term (8-20 years): China may attempt to drive the United States out of

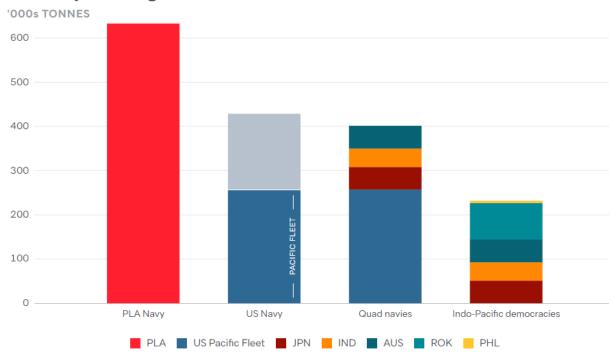
the western Pacific, and if successful will radically alter the balance of power in the region

China appears to be building a force specifically intended to be able to eject the US military from the western Pacific by force, to stare it down in a crisis, or to encourage the United States to step away from its current commitments due to overstretch, defeatism, 62 or frustration with allies. The latter could be inflamed by a perceived lack of commitment from some allies, 63 particularly given the clear scale of the threat. While the degree of any such development could vary widely, even a partial withdrawal of US power from the western Pacific would accelerate the ongoing deterioration in the regional military balance, with profound consequences on the freedom of action of regional nations like Australia.

Probably the worst-case scenario for Australia's security would be one where something like the following sequence occurs: 1. China successfully gains control of Taiwan either through force (invasion, bombardment, or blockade) or the threat thereof - say, Taiwan negotiates terms given an ultimatum, particularly if it senses wavering US commitment. 2. After China consolidates Taiwan, piercing the First Island Chain and gaining control of ports and airfields in eastern Taiwan, Japan undergoes at least partial 'Finlandization' <sup>64</sup> and requests the departure of US forces from the country. 3. Having now been relieved of the necessity to dedicate resources to the capture of Taiwan, China is able to dedicate its attention to addressing security challenges further afield.

In a less dramatic but still harmful sequence of events, the American public could become disenchanted with its security commitments in the region. Given the growing regional challenge from the PLA, the United States could as a result adopt an 'offshore balancing' strategy, essentially withdrawing its main forces to the central or eastern Pacific and again exposing regional powers to a rapidly declining military balance. This also could inspire the self-neutering of formerly powerful regional allies such as Japan and South Korea, releasing Chinese resources and attention for employment further afield.

### Warship tonnage launched 2016-2020



**Figure 3:** Warship tonnage launched by the major sea-going navies in the Indo-Pacific between 2016 and 2020 shows that approximately 60 per cent of the US Navy's ships are assigned to the Pacific Fleet.

To help gain perspective on what an American departure from the western Pacific might look like for the regional balance of military power, let us return briefly to the matter of fleet size, and specifically to warship building trends in the region. Figure 3 shows the total warship tonnage launched from 2016 through to 2020 for the major sea-going navies in the Indo-Pacific region, including the rough proportion of the US Navy that is assigned to the Pacific Fleet (about 60 per cent). Even with the US Navy in the region, on recent trends the maritime balance of power is likely to end up, at best, roughly even. But if we remove the US Pacific Fleet's contribution from the total, the trend is that the PLAN

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would eventually exceed in size the rest of the major navies in the region *combined* and would dwarf any individual regional navy. Notably, these totals do not include the significant shipbuilding of China's coast guard and maritime safety agencies, which have individual building programs that in terms of tonnage probably rival those of individual regional navies. This comparison also leaves out the PLA's land-based maritime strike air and missile forces, which no other regional power can remotely match.

Even if the United States does not make a conscious decision to withdraw its maritime forces from the western Pacific, internal challenges may sap the relative strength of US sea power in the region. The US shipbuilding program is in turmoil, with a recognition in recent years that the previous "355-ship navy" plan was likely unaffordable even before the large budget deficits generated by COVID-19-related spending. 65 As a result, near the end of the Trump administration, the US Department of Defense revealed a new "Battle Force 2045" plan that would rebalance the fleet away from larger ships, such as aircraft carriers and cruisers, to more numerous but smaller and cheaper vessels, many of which would be unmanned or "lightly manned". 66 While the plan is ambitious in its desire to alter the nature of naval warfare to maintain an advantage against the PLAN at expected budget levels, many of its elements remain unproven, its affordability is questionable,67 and the US Congress is already expressing its scepticism via cuts to related program funding.68 What all of this is likely to mean to regional partners is that, even with a desire for a firm US commitment to the region, the US Navy will need all the help it can get in coming decades.

## What a Chinese-dominated Indo-Pacific would mean for Australia's security interests

If China were to achieve air and maritime dominance in the western Pacific, what would it really mean for Australia's security interests and territorial integrity? After all, China and Australia have been engaged in peaceful trade for decades now. Why would the substitution of China's grey hulls for those of the United States in Pacific waters make a difference? The answer lies in the coercive power that China would gain over the economy, livelihood, and even territorial integrity of Australia, and also in the demonstrated willingness of China to engage in coercion (economic, for now) of Australia and other nations in the region.

Some Australian thinkers have already begun to consider what a post-American Asia might look like, and how Australia might best cope with the prospect. Hugh White's suggestion is to abandon, to a degree, general-purpose interoperability with the United States and focus instead on capabilities such as larger numbers of submarines and fighter aircraft. <sup>69</sup> This would be in an attempt to exercise sea denial in Australia's offshore waters or gain deterrence by threatening China's trade.

While the prospect of potential US retrenchment may make a go-italone plan like this seem tempting, a hard look at the numbers and forces involved makes clear that these concepts are likely to fail to maintain Australia's safety and national security. 70 Australia is highly dependent<sup>71</sup> on unimpeded access to overseas sources of energy,<sup>72</sup> food, and manufactured goods for its economic vitality, as well as access to markets for its own products. This reality is reflected in Australia's 2016 Defence White Paper, which states, "Australia's security and prosperity relies on a stable, rules-based global order which...facilitates free and open trade and enables unfettered access to the global commons to support economic development."73 The more recent 2020 Defence Strategic Update reinforces this fact, stating that access through Australia's immediate region is "critical for Australia's security and trade".74 Australia's economy would be devastated by any long-term disruption of shipping routes, with typically only a few weeks' worth of fuel on hand.<sup>75</sup>

Australia's dependence on overseas SLOCs is where China's long-term ambition to control its own SLOCs intersects with Australia's national security. Put simply, a China that can maintain the security of its own SLOCs is a China that can deny those SLOCs to others. This prospect, and not just the desire to counter a US intervention, is what truly drives the unprecedented scale of Chinese maritime expansion. It is also what threatens to give China major coercive power over the trade-dependent democracies of the Indo-Pacific. China need not attempt to invade Australia to subdue it; it may only need to establish a blockade which, with the world's largest coast guard, 10 000 ton "maritime safety" vessels, <sup>76</sup> and the most powerful navy in the region over the horizon, it could be well-equipped to do.

Some might say that by building up the Australian submarine force, Australia could sufficiently threaten Chinese trade to ensure mutual deterrence (Hugh White suggests doubling the current plan to 24 hulls). But a few key numbers can help provide a sense of scale for doing so: over the course of the Second World War's titanic Battle of

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Beyond China's potential future ability to interdict Australian overseas lines of communication, China is also on a path to develop an asymmetric ability strike directly at targets on the Australian continent.

the Atlantic, Germany's U-boats sank nearly 3000 Allied merchant ships and naval vessels over a span of several years,77 losing almost 800 submarines in the process, and still lost their campaign to cut Allied shipping across the Atlantic. By comparison, China's merchant marine (with Hong Kong's ships included) currently has more than 6000 (on average much larger) ships. 78 Additionally, over recent years the PLAN has significantly improved its anti-submarine warfare (ASW) capability, equipping virtually all of its newer surface combatants with towed array sonars, 79 developing new ASW-capable missiles for its surface ships, 80 and deploying its new fleet of ASW-capable fixed-wing patrol aircraft to its huge artificial island bases, 81 which are strategically placed to provide coverage to China's primary shipping routes across the South China Sea. While Australia's submarine force complements well the US Navy's nuclear-powered submarine force and could play an integral role in any allied effort to contain the PLAN during a conflict, in my assessment it is unlikely to be able to - on its own - pose a sufficient deterrent threat to China via interdiction of Chinese seaborne trade.

Beyond China's potential future ability to interdict Australian overseas lines of communication, China is also on a path to develop an asymmetric ability strike directly at targets on the Australian continent. As described above, absent assistance from allies and partners like the United States, China already possesses the capability to strike Australia from existing PLA bases, either with bomber aircraft or with long-range missiles. China's pending introduction of an <u>air-refuellable</u> long-range stealth bomber (the H-20) would worsen this asymmetry.<sup>82</sup>

With regard to China's future ability to take and hold territory far from home, it is important to stress that a Chinese invasion of the Australian mainland is so unlikely that it can be dismissed as a scenario on which Australia should base its defence planning. Nevertheless, China is the world's largest shipbuilder, and its prime shipyards are dual-purpose producers of civilian and military vessels. During the American emergency shipbuilding program of the Second World War, which supported massive, mechanised armies in two theatres of war thousands of kilometres from the United States, US shipbuilding production peaked at 18.5 million tons annually, with 53 million tons built over the course of the war.83 In 2020, during peacetime, China built more than 38 million tons of shipping,84 and China's merchant fleet (including Hong Kong's) totalled more than 300 million tons.85 China's shipyards have recently commenced serial production of large amphibious assault ships, with three 35 000 ton Type 075 Landing Ship Docks (LHDs) launched within the past two years alone.86

Combined with what is on pace to be the region's largest force of warships on any measure by far — and one that in the future seems likely to field multiple carrier strike groups — China has the potential to field a long-range sealift and power projection capacity that would dwarf anything that the Japanese threatened Australia with during the Second World War.

### CONCLUSION

War between Australia and China remains a remote possibility. But by its very nature, defence policy operates in the realm of low-probability, high-consequence events. And the sheer ability of the PLA to project military force over long distances places pressure on decision-makers whose actions are weighted with the fear that such force *might* be used against them. This is the essence of coercion.

As to the plausibility of China using military threats to coerce Australia, this question has essentially been answered by demonstrated behaviour - first, in China's attempts to intimidate Australia economically, and second in its manifest willingness to use the threat of force to get its way elsewhere. In its recent list of 14 grievances with Australia,87 China has indicated that resolution of its current efforts at economic coercion of Australia will require fundamental changes in the nature of Australia as a functioning democracy, such as the freedom of Australian leaders and thinkers to speak out on human rights issues as they see fit. For now, this coercion is largely economic in nature. As detailed, the PLA currently lacks the military reach to do otherwise. But as the reach of China's power projection capability grows, one need only ask Vietnam and the Philippines - both subject to threats of force by Chinese naval and maritime constabulary forces in recent years what Chinese military coercion feels like. Australians should be cleareyed enough to recognise that similar treatment could be in store for them.

### **ACKNOWLEDGEMENTS**

The author is grateful to the Lowy Institute, and to Sam Roggeveen for support and guidance, Clare Caldwell for detailed copy edits, and two anonymous reviewers for their very helpful feedback. Any errors are the fault of the author alone.

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### ABOUT THE AUTHOR

Tom Shugart is an Adjunct Senior Fellow with the Defense Program at the Center for a New American Security. His research focuses on undersea warfare and maritime competition, military innovation and acquisition, and the broader military balance in the Indo-Pacific. He served for over 25 years in the US Navy, where he last worked in the Defense Department's Office of Net Assessment. He served as a submarine warfare officer during his military service, deploying multiple times to the Indo-Pacific region and commanding the nuclear-powered fast attack submarine USS Olympia (SSN 717) from 2013 to 2016. Following his submarine command tour, he served on the Navy Staff as the principal officer providing oversight of the Columbia Class SSBN Program, the Navy's highest-priority acquisition effort. Over the course of his military career, he served aboard both fast attack and ballistic missile submarines as well as at shore headquarters; he also served on the Joint Staff as the principal officer responsible for nuclear strike planning, advising of senior Defense Department leaders on nuclear weapons employment plans, and the training of Presidential military aides and command centre personnel on nuclear command and control.

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