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## Charting the Contours of Asia's Megatrends

POLICY BRIEF



By Alexander Sullivan

Over the seven decades since the end of World War II in the Asia-Pacific region, United States leadership in concert with close allies and partners has deterred major power conflict. This relative peace, especially over the past forty years, has allowed the region to achieve rapid gains in prosperity and lift millions from poverty. That economic miracle is precipitating the long-term move of economic and political gravity to Asia. But the re-emergence of major Asian powers onto the regional and global stage, along with other consequences of global economic and technological development, are altering key facets of the postwar security environment. This paper proposes to describe seven megatrends that are shaping Asia-Pacific security, as well as a forecast of how those trends could affect regional players' choices on military modernization. I close with a brief discussion of tradeoffs and implications facing policymakers.

Bracketing military modernization out from other major trends in Asia-Pacific security is at some level specious, as changes in the military balance of power are also inputs to the broader environment. The choices that nations make on hard security are both cause and consequence of developments in the region writ large. But understanding the following set of critical security issues will clarify the type of military capabilities that countries are likely to seek, and outline a broad context for Asia-Pacific national security decisionmaking in the near-to-medium term.

### Megatrends Shaping the Asia-Pacific Security Environment

#### TREND 1: THE RISE OF CHINA

Over the past thirty years of reform and opening up, China's rapid economic gains have enabled it to accrue considerable political influence and military might, which have changed the relative balance of power in the region. It is the world's second largest economy, with some reports suggesting its Gross Domestic Product (GDP) as measured by purchasing power parity could exceed the United States' as soon as 2016.<sup>1</sup> The foundation of its economy continues to be exports and trade: In 2012, China surpassed the United States as the globe's greatest trader in goods, and ranks atop or near the top of every major Asian economy's list of largest trading partners.<sup>2</sup> China's economic gravity has led

many of its neighbors and the United States to seek friendly relations and deepened cooperation across the board.

However, China's rise has also caused deep uncertainty in regional capitals due to its relentless military modernization and increasing assertiveness in political disputes, especially those surrounding territory and maritime claims. The People's Liberation Army has seen double-digit percentage budget increases for roughly two decades, and indications are that this buildup will continue even in the face of slower overall economic growth.<sup>3</sup> Beijing has also raised tensions in maritime territorial disputes with Japan, the Philippines and Vietnam in the East and South China Seas, seizing on circumstantial pretexts to unilaterally change the territorial *status quo* and attempting to isolate potential adversaries.<sup>4</sup> Despite an incipient charm offensive intended to quell the neighborhood's fears, China's increasing willingness to flex its muscles and assert its claims – exemplified by Beijing's November 2013 proclamation of a problematic Air Defense Identification Zone in the East China Sea – has created critical uncertainties in Asia and in Washington.<sup>5</sup> Asia-Pacific nations are balancing ties to China, the region's economic fulcrum, with a desire to avoid total accommodation of Chinese preferences.

Although China's rise has already dramatically reshaped Asia's strategic landscape, a straight-line ascendancy is by no means assured. A myriad of demographic and economic challenges could complicate Beijing's attempts to avoid the so-called "middle income trap." GDP growth has already slowed to below 8 percent in 2013, and opinions vary as to the mainland's future prospects.<sup>6</sup> Communist Party leaders, recognizing the coming hurdles, have announced a thoroughgoing program of market-based economic reforms that seek to stimulate a domestic consumption-driven growth model. But these policy shifts will face opposition

from a variety of vested interests. Adequate implementation is far from certain.<sup>7</sup> However China's development proceeds, events on the mainland will affect security dynamics throughout the region.

## TREND 2: REBALANCING AND THE FUTURE OF U.S. LEADERSHIP

In its first term, the Obama administration – building on efforts begun during George W. Bush's presidency – took initial steps in a wholesale refocusing of U.S. strategic attention and priorities to the dynamic Asia-Pacific region. These steps included but were not limited to the conclusion of a landmark free trade agreement with South Korea, accession to the East Asia Summit, and rotational deployments of U.S. Marines in Darwin, Australia and the U.S. Navy's new Littoral Combat Ships in Singapore. Other efforts were made to reaffirm commitments to traditional allies and reach out to new partners.<sup>8</sup> This so-called "pivot," later re-termed the rebalancing policy, envisions an Asia-Pacific governed by open, inclusive rules and norms that ensure access to the global commons – sea, air, space and cyberspace. It was codified in policy documents including the 2012 Defense Strategic Guidance issued by the Department of Defense, which stated that the Pentagon would "*of necessity rebalance toward the Asia-Pacific region*" [italics in original].<sup>9</sup> Subsequent statements included a commitment to deploy 60% of the Navy's ships to Asia by 2020.<sup>10</sup>

This strategic shift generated considerable enthusiasm at home and in regional capitals, but it has also had detractors. Beijing has repeatedly alleged that the policy is, *sub rosa*, Cold War-style containment aimed at limiting China's rise – despite the emphasis on elevated U.S.-China engagement that is central to rebalancing.<sup>11</sup> Even those who agreed with the logic have been at times troubled by U.S. implementation: some argue that the first term initiatives were too military- and defense-focused.

Others, not least in regional capitals anxious for a strategic counterweight to Beijing, worry that the administration's rhetoric has not been adequately resourced or that attention will wane.<sup>12</sup>

Rhetorical reaffirmations of the rebalancing by new National Security Advisor Susan Rice, a refocus in the second term on the ambitious Trans-Pacific Partnership trade agenda, and a December 2013 Vice Presidential trip to Northeast Asia have assuaged many short-term concerns over the health of the policy.<sup>13</sup> Nonetheless, the anxiety in Asia about President Obama's missed trip to the region in October 2013, due to the recent government shutdown, reveals that the long-term fate of U.S. Asia policy is contingent upon the efficacy and direction of the U.S. political process. The United States' position in Asia is fundamentally strong, but if it fails to get its economic house in order, it may not be able to afford the outlays associated with forward-deployed military forces and other types of strategic engagement. Or, growing isolationism among the U.S. public and elected representatives could motivate a unilateral – and wrongheaded – withdrawal from the region and the world.<sup>14</sup>

While a move as drastic as U.S. withdrawal is unlikely given America's enduring interests in the region, even regional perceptions of U.S. hesitancy, stemming from commitment by half measures, could raise instability in unforeseen ways. On the other hand, if the United States and its partners can shape an inclusive, rules-based system that includes a prosperous and open China, the region will be able to continue peacefully thriving as it has done for decades with U.S. leadership.

### **TREND 3: INTERSTATE COMPETITION WITH POTENTIAL FOR CONFLICT**

Competition arising from multiple sources will remain a salient aspect of Asia-Pacific security politics for the foreseeable future, characterized by a low persistent level of uncertainty and tensions

### **Japan's Re-Emergence and Normalization**

In the past year under returned Prime Minister Shinzo Abe, Japan has taken a number of steps to revitalize economic growth and assume a more normal and effective defense and security policy. As Japan's first-ever National Security Strategy, published December 2013, states "In a world where globalization continues, Japan should play an even more proactive role as a major global player in the international community." Concrete steps on security have included the creation of a National Security Council, a beefed-up five-year defense spending plan, and the adoption of new capabilities. A reinterpretation of the Constitution to allow limited exercise of collective self-defense is expected later this year.

If implemented, Japan's energetic yet cautious defense reforms could turn it from a net consumer of security to a net provider. While they are to some extent motivated by Chinese pressure, the moves toward normalization could provide meaningful dividends for regional security over the long run, including in building the capacity of Southeast Asian countries. Japan could also be among the most active Asian powers in providing security outside of the immediate region. See Megatrend 6: Asia Goes Global.

punctuated by episodes of coercive diplomacy and acute crises – "grey zones" between peace and war. While the possibility of major interstate conflict remains low, it cannot be ruled out.

Asia lacks strong multilateral security mechanisms, such as NATO, that can dampen crises and govern dispute resolution. Historically, the United States' military preponderance has maintained stability, but rising nations and questions over U.S. staying power could create space for competitive dynamics to upend regional peace and security.

The principal drivers of competition are maritime territorial and sovereignty disputes that are both unlikely to be resolved in the near term and often animated by historical animosities and nationalist passions. Political leaders can aggravate disputes by deploying these volatile public sentiments to shore up domestic legitimacy, stymieing compromise and increasing instability. Resource insecurity also motivates competing claims, as even small islets and associated maritime delimitation claims bring (or are perceived to bring) access to fisheries, hydrocarbons and seabed mineral resources. Growing and urbanizing Asian populations will demand ever more resources, increasing pressure on governments to deliver adequate supplies of food, water and energy.<sup>15</sup>

Prominent examples of such disputes include: Scarborough Shoal in the South China Sea, site of a tense 2012 standoff between China and the Philippines that ended in China's illegal occupation of the formation; and the Senkaku/Diaoyu islets in the East China Sea, over which China has mounted a pressure campaign in the surrounding seas and airspace seeking to contest Japan's administrative control.<sup>16</sup> While many countries maintain competing sovereignty and territorial claims (in total, seven countries declare ownership of various contested formations in the South China Sea), the common denominator in the most active and dangerous rows is China. Moreover, China's conduct vis-à-vis rival claimants has introduced worrying new precedents that increase the risk of conflict stemming from accident or miscalculation – especially if they gain broad currency as acceptable means by which to advance claims.

In its moves against Japan and the Philippines, China has employed stacked strategies of “reactive assertiveness” and “tailored coercion” to effectively change Asia's territorial *status quo*. The former refers to finding a small misstep by the counterpart

nation, using it as a pretext to raise or revive a dispute, and then rapidly escalating through application of both political pressure and overwhelming material presence implying the threat of force.<sup>17</sup> “Tailored coercion” refers to confronting a target nation while politically isolating that country from its neighbors and especially military allies, which in the case of Japan and the Philippines means keeping Washington at bay.<sup>18</sup> A crucial element of both these strategies is the use of constabulary forces, such as China's new Coast Guard, to exert constant pressure and claim administrative jurisdiction but keep the crisis below the military threshold.

Vessels operating in close proximity – in the air, on the surface or underwater – create inherent risks of accident or miscalculation. These risks are perhaps lessened but certainly not obviated by the use of non-military craft, especially when said vessels are nonetheless undertaking coercive action and escalatory dynamics are ill-understood on all sides. As Indo-Pacific waters grow inexorably more crowded, the likelihood of incidents rises.<sup>19</sup> In the context of historical tensions, intractable disputes and fractious interstate politics, crises are probably inevitable and continued peace and stability is not a foregone conclusion.

#### **TREND 4: BILATERAL AND MULTILATERAL SECURITY COOPERATION**

While regional politics are in some ways becoming more contentious, the Asia-Pacific is also seeing an unprecedented level of regional security cooperation at both the bilateral and multilateral levels, which will continue in the coming years. This trend is partly borne of generally increased connectivity due to trade, years of diplomatic integration, rising levels of capability among potential partners and intensified non-traditional security threats such as piracy and large-scale disasters, which are inherently transnational. However, Asian countries are also hedging against the ascendancy of a revisionist



Beijing, or Washington's possible curtailed commitment to the region. Many are economically dependent on China but rely on the United States for their security; drawing closer together through security cooperation alleviates pressure to pick a side.<sup>20</sup> If China grows even more assertive, these ties could become active if still tacit balancing coalitions.<sup>21</sup>

Bilateral intra-Asian security ties – what several analysts at CNAS termed the “emerging Asia Power Web” – have deepened dramatically over the last decade and are already supplementing the “hub-and-spoke” U.S. alliance system.<sup>22</sup> Such relationships comprise defense diplomacy, defense and security agreements, joint exercises and training, defense exports and other forms of cooperation. Among them are important new linkages between East and Southeast Asia, as well as between the Pacific and Indian Oceans. Japan conducted its first joint naval exercise with India in 2012. Japan is also strengthening its relationships with both Vietnam and the Philippines, themselves targets of recent Chinese assertiveness, by building maritime law enforcement capacity. Canberra and Tokyo continue to elevate the scope and complexity of joint combined-arms training, and are exploring a joint submarine program. These trends as well as trilateral cooperation should be expected to continue, although Asian countries are unlikely to commit to binding mutual defense agreements like those the United States has with its allies.

Asia's regional multilateral security architectures are also growing stronger, though with perhaps more limits than bilateral relationships.<sup>23</sup> Most regional processes are centered on ASEAN, including the ASEAN Regional Forum (ARF), the East Asia Summit (EAS) and the ASEAN Defense Ministers' Meeting Plus (ADMM+). These forums provide platforms to discuss important security issues. But ASEAN's consensus-focused style limits

practical cooperation to issues that, while critical for human security, are of the broadest shared concern, to include humanitarian assistance/disaster relief (HA/DR), military medicine and counter-piracy.<sup>24</sup>

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Because of ASEAN's central role, a region-wide approach to security may hinge on whether it can achieve consensus on a rules-and-norms-based system for dealing with territorial disputes and other key issues. Skeptics point to the ASEAN summit in Phnom Penh in summer 2012, when disagreement by chair nation Cambodia on including a reference to China's expansive South China Sea claims resulted in the body's first failure to issue a joint communiqué in its four-decade history.<sup>25</sup> Even if ASEAN can close ranks, China's professed willingness to enter negotiations on a binding Code of Conduct for the South China Sea may be nothing more than a stall tactic.<sup>26</sup>

Regional security integration will continue in coming years, with bilateral ties outpacing multilateral structures but still subject to clear limitations. Left and right bounds for cooperation are difficult to forecast: there remains ample room for skepticism, yet there is also limited evidence that an increasingly acute security environment could overcome countries' reluctance to form coalitions against coercive behavior.<sup>27</sup> Nor is the ultimate effect of

such ties on regional security clear, as potential bad outcomes abound, to include arms racing and closed sub-regional, vice open and inclusive, security architectures.

#### **TREND 5: DOMESTIC ECONOMIC AND POLITICAL INSTABILITY**

Despite its incredible economic dynamism and relative peace since WWII, many Asian countries remain susceptible to economic volatility and domestic political instability, with potentially nasty knock-on effects for regional security. The Asia-Pacific is home to immature democracies, autocratic regimes that have staked their legitimacy on delivering economic growth, discontented ethnic and religious minorities, and governance challenges ranging from corruption to environmental degradation and inadequate disaster response.

Notwithstanding robust growth in the past several decades, Asian economies remain vulnerable to volatility in the global economy and financial system. Despite policies designed to promote domestic consumption-based growth, many countries are still highly export-dependent and overly reliant on the cheap credit enabled by U.S. quantitative easing.<sup>28</sup>

Ruling autocratic parties in countries like China and Vietnam have staked their legitimacy on delivering continued economic growth and rising living standards, and it is unclear what consequences a prolonged slowdown might have for regime stability.<sup>29</sup> Developments in North Korea are murky as always, but experts hold open the possibility of regime collapse in the near to medium term.<sup>30</sup>

Asian democracies, many of which are still immature, are facing short-term tests of political stability. Thailand is on the verge of its second coup in a decade, while ethnic Malay separatists continue to challenge the government in its

southern provinces.<sup>31</sup> Singapore has just seen its first riot in over four decades, which may have stemmed from discontent among its large migrant worker population.<sup>32</sup> The political future of the nominally democratic, semi-authoritarian city-state after the death of national patriarch Lee Kuan Yew is also uncertain.<sup>33</sup> The inchoate democracy in Myanmar, while seeking to manage a myriad of economic and political reforms, is confronting persistent sectarian violence against the Muslim Rohingya minority.<sup>34</sup>

Demographic concerns will likely present acute challenges to Asia-Pacific countries in the medium term. Widespread graying over the next ten years in Northeast Asia will put pressure on social safety nets and could hamper economic growth. Southeast Asia, by contrast, is still experiencing a population boom, which could bring economic benefits but strain limited governance capacity.<sup>35</sup>

Rapid urbanization is expected across the region, with an estimated annual average of 44 million people moving to urban areas through 2030.<sup>36</sup> This rush to the cities will put massive pressure on infrastructure and the environment, especially fresh water resources.<sup>37</sup> Human concentration in urban areas along the coast increases vulnerability to loss of life and property from natural disasters at a time when climate change is making such catastrophes more common. Tragedies such as the March 2011 earthquake in Japan and the damage from Typhoon Haiyan in the Philippines lend urgency to efforts by individual countries and regional bodies to prepare effective risk reduction, resiliency, and response plans.<sup>38</sup>

Domestic economic or political instability in any given country could affect regional stability and security in diverse ways. Governments beleaguered by troubles at home could retrench and disregard foreign policy concerns in favor of internal policies. Foreign policy neglect could mean lowered

temperatures on international disputes, but distracted countries are also less able to contribute to regional security initiatives. On the other hand, struggling regimes could become more assertive internationally in the hopes of stoking nationalism for extra legitimacy.

#### **TREND 6: ASIA GOES GLOBAL**

The substantive involvement of large Asian powers in affairs outside Asia is only in its earliest stages, but increasingly global economic interests – especially dependence on Middle Eastern energy resources – and growing capacity will likely impel countries such as China, India, Japan and South Korea to become more involved in global geopolitics.

Historically speaking, Asian countries have been loath to get involved outside their immediate neighborhood, preferring instead to free-ride on the United States' provision of security, especially in keeping sea lines of communication (SLOCs) open. But Asia's colossal thirst for energy, particularly oil and natural gas, is reshaping the energy map. Total energy demand in non-OECD Asia (which excludes Australia, Japan, South Korea and New Zealand) is expected to more than double between 2010 and 2040.<sup>39</sup> The Asian Development Bank estimates that developing countries in Asia, led by China and India, will consume more than half of the world's total energy by 2035.<sup>40</sup> Much of this gigantic increase in demand will be fed by hydrocarbon supplies from the Middle East – already in 2010, nearly half of developing Asia's oil imports came from that region.<sup>41</sup> Outbound investments by East Asian national oil companies (NOCs) reflect this growing trade: Chinese NOCs had well over \$100 billion in upstream investments by 2011, while Japanese, South Korean and Indian NOCs also had substantial overseas projects.<sup>42</sup>

Surging Asian demand from the Middle East must be viewed against diminished U.S. reliance

on imported energy sources overall, due to robust domestic production growth associated with the unconventional energy boom. The Energy Information Administration has recently estimated that U.S. net use of imported energy sources will fall to 4 percent of total consumption by 2040.<sup>43</sup> The United States will maintain a strategic interest in stable energy markets and the free flow of oil from the Middle East so as to obviate price shocks. But reduced dependence may allow the U.S. government to limit direct exposure to an unstable region where it has expended much blood and treasure for limited strategic benefit. In a world where the United States were doing less in the Middle East, greater security responsibilities could fall at the feet of Asian countries.

In fact, Asian militaries have already made substantial contributions to counter-piracy efforts in the Gulf of Aden, coordinating to police SLOCs off the Horn of Africa and throughout the broader Indian Ocean region. Australia, Japan, New Zealand and South Korea have all participated under the auspices of the U.S.-led Combined Maritime Forces, while China, India, and Russia have coordinated with CMF nations in parallel operations.<sup>44</sup> The immediate benefits to such countries include prestige and, most importantly, operational experience for militaries unused to sustaining long-range international activities.<sup>45</sup>

The Arctic, with its vast untapped resources and newly opening waterways, also represents a potential arena for Asian security activities despite the obstacles to operating in such a forbidding climate.<sup>46</sup> China, India, Japan and South Korea are all strongly pursuing a voice in any potential Arctic governance regime despite not being Arctic nations.<sup>47</sup>

Given mounting economic interests worldwide, Asian countries' ongoing overseas deployments likely presage expanded efforts to operate in the

broad Indian Ocean region, the Arctic and beyond, especially as Australia, China, India, Japan, Russia and South Korea develop further power projection and sustainment capabilities.

#### **TREND 7: NEW TECHNOLOGIES: DEMOCRATIZATION AND DISRUPTION**

The impact of new technologies – either those that are truly emergent or existing technologies embraced by new actors – on international security is difficult to forecast. But as Asian nations and publics grow wealthier, the penetration of advanced technologies, both military and civilian, is expected to increase in the coming years. Considered below are several ways in which technology could affect geopolitics, crisis stability, and Asia's economic foundations.

The development and broad adoption of advanced military capabilities across Asia could complicate deterrence, change the offense-defense balance and erode crisis stability. Military technologies are now being developed to undermine the long-range precision strike and power-projection capabilities on which U.S. military primacy has depended, and over which the United States has heretofore enjoyed a virtual monopoly. These so-called “anti-access/area denial” (A2/AD) (or in Chinese parlance, “counter-intervention”) strategies emphasize, among other things, seizing the initiative by destroying or degrading enemy C4ISR systems before he can begin to do damage, crippling even powerful weapons systems.<sup>48</sup>

In a crisis scenario, this could create a “use it or lose it” mentality among commanders – a desire to wreck the enemy's C4ISR before he can wreck mine. Merely the perception that counter-intervention capabilities are effective thus creates conditions that favor the offense and rapid escalation. This is especially true given the importance of space and cyberspace weapons in most understandings of counter-intervention strategy, due to the opacity

and lack of norms in these emerging domains.

Anti-access/area denial capabilities are rightfully associated with the Chinese People's Liberation Army, but in the medium-to-long term, these weapons are likely to proliferate to increasingly wealthy countries across the region. Broad adoption of counter-intervention capabilities could alternately undermine or solidify deterrence depending on the rate at which advanced actors can further innovate counter-A2/AD technologies.<sup>49</sup>

Looking far enough into the future, one also cannot expect advanced weapons to remain in the hands of states.<sup>50</sup> Terrorism remains a concern in Asia, and could intensify if the situation on China's leeward border deteriorates following the U.S. drawdown from Afghanistan.<sup>51</sup> Adoption of advanced weapons by terrorists or other extremist non-state actors in Asia would introduce a major new wrinkle into nations' strategic considerations.

Several other new technologies could erode the foundations of economic and political stability in the Asia-Pacific. Communications technologies that empower individuals and aid collective organization could exacerbate political instability by allowing networks to more directly press claims on governments.<sup>52</sup> A longer-term and more speculative threat is the danger that automation and additive manufacturing, or 3-D printing, pose to global supply chains.<sup>53</sup> Much of Asia's growth still stems from export manufacturing, with economies on the developing end of the spectrum relying on ultra-competitive labor costs offsetting costs of transport to consumers. If goods are produced with minimal human labor near the final market, a foundational element of Asian economies could be undermined. Much will depend on the rate of maturation of new manufacturing technologies – and how quickly Asia's economies can transition to consumption-based growth.



## Military Modernization in the Asia-Pacific Security Environment

Asia-Pacific defense spending has risen dramatically over the last decade – surpassing Europe’s for the first time ever in 2013 – and it will continue to grow rapidly as countries grow wealthier and seek advanced capabilities.<sup>54</sup> While a prolonged economic downturn could temporarily erode the fiscal wherewithal necessary for modernization, the secular trend is for Asia’s defense spending to continue rising.

As the defense market grows, advanced Asian countries will increasingly become producers as well as consumers of defense articles, boosting the intra-regional arms trade. Countries such as China, India and Russia see strategic vulnerability in being dependent on foreign companies for some defense articles, and view indigenously produced systems as articles of national pride; other countries, especially those with export-dependent economies, have political incentives to support domestic manufacturers and grow foreign sales.<sup>55</sup>

As befits a region as vast and diverse as Asia, nations vary widely in their financial and institutional capacity to engage in military modernization. The region is home to a handful of advanced militaries with high-end capability: principally China and U.S. allies Australia, Japan and South Korea, but also India and to some extent Russia, Singapore and Taiwan. Military modernization for the rest of the Asia-Pacific, basically the ASEAN nations other than Singapore, is still incipient and bedeviled by governance problems. Vietnam is acquiring new capabilities, but is working from behind after long delays in serious modernization. Indonesia has increased its defense spending by almost 75 percent in the last decade, but its outlays are still less than 1 percent of GDP.<sup>56</sup> The Philippines’ efforts to acquire a minimum credible defense have been continually frustrated by

mismanagement.<sup>57</sup> Many of the land-based countries in ASEAN are not taking part in otherwise robust naval modernization across the region, due to their relatively modest maritime interests.

Below are the capabilities most sought or likely to be sought by Asian nations, in rough order of priority. Meticulous detailing of programs and systems is beyond the scope of this paper; examples cited are for illustrative purposes and should not be taken as comprehensive. As stated above, not every country will invest in every capability set. Unforeseen circumstances may also intervene to alter actors’ decisionmaking.<sup>58</sup> But the following gives a general idea of where the Asia-Pacific will be allocating its defense dollars over the medium term.

### COMMAND AND CONTROL, COMMUNICATIONS, COMPUTERS, INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE (C4ISR)

C4ISR is the key enabling capability for nearly every type of military operation. Asian nations are prioritizing investment in C4ISR systems, platforms, networks and processes almost across the board, for missions from basic peacetime maritime domain awareness to command and control in contingencies. The need for firm but cautious responses to challenges in maritime territorial disputes is a principal driver for building C4ISR capability.<sup>59</sup> Investments under this broad category include: airborne sensor platforms, both manned and unmanned<sup>60</sup>; airborne early warning and control platforms<sup>61</sup>; maritime patrol ships and aircraft<sup>62</sup>; shore-based radar systems<sup>63</sup>; and back-end computing and communications capabilities.<sup>64</sup> On a longer time horizon, countries will also likely invest in unmanned underwater vehicles (UUVs) for subsea ISR. Advanced nations will continue to invest in space-based sensors and communications systems, and U.S. allies could seek greater partnerships with the United States military in space.<sup>65</sup> As technological developments like microsatellites lower the barriers to entry, other countries could

expand their space presence for national security purposes.<sup>66</sup>

### MARITIME CAPABILITIES

The last decade or more has seen Asian navies and maritime forces undertake both quantitative expansion and qualitative modernization. Asia is fundamentally a maritime theater, with countries in the region holding some of the globe's largest exclusive economic zones (EEZs). Maritime tensions of recent years have only increased the demand for credible forces to deter aggression and defend maritime claims. Large nations such as China and India are fielding new aircraft carriers, while other countries such as Australia, Japan and South Korea operate flattop amphibious assault ships that can accommodate fixed-wing aircraft.<sup>67</sup> While the People's Liberation Army Navy (PLAN) is still inexperienced in carrier air operations, its future plans include multiple carrier battle groups supporting indigenously produced large aircraft carriers.<sup>68</sup> Countries that operate smaller amphibious flattops could seek next-generation Short Take Off / Vertical Landing (STOVL)-capable fighter aircraft as force multipliers for existing hulls. Although power projection forces with organic air support are beyond the reach of most Southeast Asian countries, there is investment across the region in larger surface combatants, to include corvettes, frigates and destroyers.<sup>69</sup> As countries eye their neighbors' purchases, we can expect Asian investment in modern naval systems to continue apace or accelerate.<sup>70</sup>

Subsea capabilities are another key priority for modernizing navies around the region. Australia, China, Japan, India, Indonesia, Malaysia, Russia, Singapore, South Korea and others have either recently announced major acquisitions or are planning significant expansions to their silent services.<sup>71</sup> Nations value the unique asymmetric capabilities of submarines in view of rapid expansions in

surface fleets. As mentioned above, future developments should include new focus on unmanned or autonomous underwater systems, for subsea ISR and combat capabilities. There will also likely be investment in capabilities to degrade the United States' and other nations' subsea forces, including ways of sabotaging U.S. Sound Surveillance System (SOSUS) and other underwater tracking systems. Much of this investment will take place out of the public eye due to its sensitivity.

While the main thrust of Asian naval modernization has emphasized upgrading "brown-water navies" to operate further from shore, the prominence of constabulary forces in asserting administrative jurisdiction has also impelled nations to reorganize and improve their maritime law enforcement agencies. As China's aggressive paramilitary use of its coastal agencies to press claims becomes the new normal, we can expect further quantitative expansion and increasing armament of constabulary forces that have found themselves on the front lines of Asia's disputes.<sup>72</sup>

### AIR COMBAT CAPABILITIES

Air operations are implicitly included in defending maritime claims, as evidenced by the recent row between China, Japan and South Korea over China's new Air Defense Identification Zone.<sup>73</sup> Highly capable militaries around the region are pursuing advanced fifth-generation fighters, to include the U.S. F-35 Joint Strike Fighter, the Russian Sukhoi Su-35 and China's indigenous J-20 and J-31 programs. Given how highly networked such fighters (and indeed all next-generation military hardware) are, nations are likely to invest in advanced electronic warfare capabilities, especially airborne electronic attack.

Unmanned aerial vehicles have already entered the tense Sino-Japanese standoff over the Senkaku islands, and regional air forces are acquiring UAVs for surveillance purposes. The next generation of

drone technology – stealthy unmanned combat air systems (UCAS) such as the U.S. Navy’s X-47B or the Chinese *Li Jian* drone – is still under development; high barriers to entry will likely preclude all but the most sophisticated actors from fielding capabilities in the near term. Nonetheless, as the technology matures, UCAS’ advantages in range, persistence and lower risk to life will lead Asian militaries to acquire these capabilities where possible. This development will have uncertain effects on crisis stability.<sup>74</sup>

To supplement all types of new power projection capabilities, countries are investing in critical sustainment capabilities, including air refueling tankers and strategic airlift. Investment in these capabilities will likely be concentrated among countries with wider strategic apertures, especially Australia, China, Japan, India, Russia and South Korea.<sup>75</sup>

#### AMPHIBIOUS CAPABILITIES

Ground forces across Asia are increasingly including amphibious capabilities, both for combat and noncombat operations, as core priorities in coming years. Chief among this group are Australia and Japan, who have partnered with the United States Marine Corps for joint training in ship-to-shore operations.<sup>76</sup> Japan’s interest stems both from the requirement to protect the Senkaku islands from seizure by Chinese ground forces and from its experience providing relief from the 3/11 disasters.<sup>77</sup> China is also emphasizing amphibious operations, presumably with both the Taiwan Straits and the East and South China Seas in mind.

Amphibious capabilities require investment not only in materiel – surface ships, ship-to-shore connectors such as amphibious assault vehicles and hovercraft, helicopters and other air assets – but chiefly in training. Sustaining movement inland following initial landing requires significant practice in the relevant logistics. In this sense, U.S. allies

have a serious leg up through opportunities to train with the USMC, and we could see more countries seeking this type of military-military engagement in the future.

National decisionmakers have added incentive to prioritize amphibious operations, as they are critical for humanitarian assistance and disaster relief missions, especially in archipelagic nations like the Philippines. China’s 2011 noncombatant evacuation operation (NEO) that extracted over 30,000 of its citizens from Libya provides an intriguing example of amphibious operations in an expeditionary context.

#### PRECISION STRIKE

Highly capable nations are increasing the sophistication and range of their precision strike capabilities, especially in Northeast Asia, where countries live under the shadow of North Korea’s nuclear and missile programs. China’s missile forces represent a focal point of its A2/AD strategies.<sup>78</sup> South Korea recently extended the range of its ballistic missiles, while Japan’s new defense programs include exploration of a conventional long-range precision-strike deterrent aimed at North Korea.<sup>79</sup> India and Russia are cooperating on an advanced supersonic cruise missile that could also be sold to Vietnam.<sup>80</sup> India has also recently tested a nuclear-capable ballistic missile intended as a deterrent against China.<sup>81</sup>

Big players should continue to modernize their forces in the coming decades. In addition, as described above, other Asian countries could invest in precision strike capabilities for asymmetric counter-intervention and deterrence.

#### BALLISTIC MISSILE DEFENSE

Growing investment in ballistic missile defense (BMD) assets is a natural corollary of advancements in offensive strike capabilities – particularly as an unpredictable North Korea progresses toward

an operational nuclear-capable ballistic missile. Naturally, South Korea and Japan are both committed to strengthening BMD and ensuring interoperability with the United States, who guarantees both countries its extended nuclear deterrent. We can expect both countries to continue modernizing both shore-based and at-sea BMD technology and, should bilateral relations warm, to cooperate more on information-sharing for BMD missions.<sup>82</sup> China, long a vociferous critic of U.S. and allied BMD systems that it viewed as undermining its nuclear deterrent, has entered the market in recent years and can be expected to build its capabilities.<sup>83</sup> High barriers to entry will likely preclude less advanced militaries in the near term, but eventually the severity of Chinese and North Korean missile threats could induce countries like Vietnam and the Philippines to invest in BMD, likely seeking partnerships with the United States or with U.S. allies.

#### SPACE AND CYBERSPACE CAPABILITIES

Space and cyberspace-based infrastructure is the backbone of modern, networked military forces. As such, defense and offense in both domains will be core emphases for advanced Asian militaries going forward. China in particular has sought capabilities to attack the U.S. military's critical space architecture, most publicly with its 2007 anti-satellite missile test.<sup>84</sup> In addition to kinetic attack from ground-launched rockets, China and other Asian militaries could use satellites (including microsattelites or nanosatellites) to attack enemy space assets in a crisis.<sup>85</sup>

Asia-Pacific nations are also formalizing programs for military use of cyberspace. Chinese efforts to build their cyber capabilities for espionage and potential warfare have been well documented in recent months, but it is by no means the only country so engaged. Australia, India, Japan, North Korea, Russia, Singapore and South Korea are

*Given the deep integration of information technology into every aspect of modern society and military operations, it is expected that advanced countries will continue to develop ever more elaborate capabilities, while less sophisticated countries will invest more in resilience and basic defense in the near term.*

investing in cyberspace capabilities for defensive and probably offensive operations.<sup>86</sup> Given the deep integration of information technology into every aspect of modern society and military operations, it is expected that advanced countries will continue to develop ever more elaborate capabilities, while less sophisticated countries will invest more in resilience and basic defense in the near term.

#### SPECIAL OPERATIONS FORCES

Many Asian countries have been favorably impressed with the success of U.S. and partner special operations forces in the wars of the last decade. The flexibility of SOF in terms of roles and missions appeals to countries confronting both internal and external challenges, for instance counterterrorism or rapid response to remote island contingencies. Moreover, while maritime and air forces are assuming greater importance in national military establishments, the highest levels of uniformed leadership in many Asia-Pacific nations still comes from ground forces, in part due to continued fears about political stability and internal security. All of these dynamics are motivating countries, especially those in Southeast Asia, to build up special operations capabilities; the United States has played a key role in fostering regional coordination on these efforts.<sup>87</sup>



### INTERNAL SECURITY FORCES

Reporting on security force modernization often focuses exclusively on militaries as external executors of national policy. Nonetheless, in many countries around Asia, either the military has a significant responsibility for internal security or there is a complementary paramilitary force that executes that mission. Often lost amid reports of China's rapid military spending increases is the fact that the People's Armed Police, the paramilitary counterpart that manages internal security and stability, has a larger official budget than the PLA.<sup>88</sup> Because domestic political stability remains a pressing concern for most Asia-Pacific countries as described above, they are likely to invest in law enforcement, counterterrorism and related capabilities, including computer-enabled surveillance systems (of which the robust Chinese censorship system is the most prominent example). Countries will also invest in hardening and resilience against a range of domestic disasters, especially kinetic or cyber attacks on critical infrastructure.

### JOINT OPERATIONS

Following on the U.S. model of joint military operations, Asia-Pacific nations are increasingly emphasizing the type of adjustments to doctrine, organization and especially training that enables truly integrated combined-arms operations. Japan's new National Security Strategy emphasizes a "dynamic joint defense force," while Australia has identified "jointness" as a key priority in its most recent Defense White Paper.<sup>89</sup>

While fiscal constraints may dictate what type of material assets different countries are able to invest in, doctrinal innovations in joint operations rely more heavily on institutional capacity, education and the intellectual base. Only countries with professionalized military personnel and robust education systems overall are likely to make significant progress towards competence in joint operations.

### Implications for Policymakers

United States policymakers can do more to assuage concerns over the meaning and durability of its rebalancing to the Asia-Pacific. Despite the best efforts of successive administrations, considerable confusion persists both at home, in the region and indeed around the world. The White House should direct the National Security Staff to produce a clear, authoritative Asia-Pacific strategy document that can provide top-level guidance to government agencies and signal clear priorities to friends and partners abroad.<sup>90</sup> Without creating unrealistic or overly rigid goalposts (change being the only certainty about the future), the document should envision what kind of Asia-Pacific it wants to lead, including: free and open access to the global commons; peaceful and cooperative management of disputes and disagreements; strong regional multilateral institutions, principally ASEAN; robust, balanced economic growth that can harness technological disruption rather than suffer from it; stable societies based on broad respect for democratic values and human rights; a constructive role for Asian nations in the rest of the world; and so on.

In order to have a meaningful shelf life, the strategy must address longer-term challenges, including those discussed above. It must, as U.S. policy already seeks to do, strike a balance between reassuring allies and partners and countering coercion on the one hand, and enhancing bilateral relations with China on the other. But the strategy should also look ahead and offer a catalog of practical options for mitigating risk and managing maritime disputes at the bilateral, regional multilateral, and global supranational levels. In addition, it should lay out the principles by which the U.S. will approach the so-called "Asia Power Web," that is, burgeoning security ties between Asia-Pacific nations themselves. Finally, whether or not it is discussed in a public

forum, U.S. strategists must consider whether it will resolutely maintain military superiority in the region, or is willing to accept eventual military parity with China in the region – understanding that this question involves tradeoffs between possibly severe fiscal strain in the former case, and the ability to defend key values, interests and allies in the latter.

Defense strategists must also fully consider the implications of the military modernization developments outlined above. Today's trend lines suggest that the United States could one day face one or more near-peer competitors for whom the Asia-Pacific is a primary theater. The proliferation of precision-guided munitions, space and cyberspace capabilities in particular could dramatically raise the costs of U.S. power projection in the region. Given limited fiscal resources, the Department of Defense must ruthlessly evaluate areas of U.S. competitive advantage and critical weakness, weigh tradeoffs between short-term risk and long-term superiority, and be prepared to de-emphasize legacy capabilities in favor of disruptive new technologies.

In a fast-moving world, policymakers and strategic planners tend to focus on short- or mid-term challenges and opportunities – the world of today and tomorrow. Inasmuch as achieving a long-term vision is a cumulative, incremental process, this close attention to pressing issues is warranted. But durable strategy, which involves taking necessary risks at the appropriate times, requires a longer-term framework for understanding a changing Asia-Pacific. The trends identified above suggest some fundamental contours along which the Asian security environment will develop. None of them are entirely discrete, and in the event they will interact in unpredictable ways, producing new trends as time goes on. Those whose job it is to plan for

the future should be cognizant of the long-term drivers of change, and address them in setting strategic priorities going forward.

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## ENDNOTES

1. Simon Rabinovitch, "China forecast to overtake US by 2016," *Financial Times*, March 22, 2013.
2. In 2012, China was the largest trading partner for Australia, Japan, South Korea and the 10-member Association of Southeast Asian Nations (ASEAN). It was India's largest import source and second largest trading partner overall, behind the United Arab Emirates. "China Eclipses U.S. as Biggest Trading Nation," *Bloomberg News*, February 10, 2013, <http://www.bloomberg.com/news/2013-02-09/china-passes-u-s-to-become-the-world-s-biggest-trading-nation.html>; Data for Australia, Japan and South Korea generated from World Trade Organization's Trade Profiles database; India data generated from Indian Ministry of Commerce's Export Import Data Bank; "China-ASEAN trade to hit 500 bln USD," *Xinhua*, July 23, 2013, [http://news.xinhuanet.com/english/china/2013-07/23/c\\_132566755.htm](http://news.xinhuanet.com/english/china/2013-07/23/c_132566755.htm).
3. Li Yanliang, "The Third Plenum's Effect on China's Foreign Policy," *China-US Focus*, December 6, 2013, <http://www.chinausfocus.com/political-social-development/the-third-plenums-ffect-on-chinas-foreign-policy/>.
4. Patrick Cronin, "China's Tailored Coercion," *War on the Rocks*, November 25, 2013, <http://warontherocks.com/2013/11/chinas-tailored-coercion/>.
5. Bonnie Glaser and Deep Pal, "China's Periphery Diplomacy Initiative: Implications for China Neighbors and the United States," *China-US Focus*, November 7, 2013; David Cohen, "East China Sea Air Defense Moves: What for and Why Now?," *China Brief* 13 No. 24 (Washington: Jamestown Foundation, November 27, 2013).
6. Natalie Thomas, "China 2013 growth seen at 7.6 percent, topping target, slowdown likely next year: Poll," *Reuters*, October 24, 2013, <http://www.reuters.com/article/2013/10/24/us-china-economy-gdp-idUSBRE99N0BE20131024>.
7. Moran Zhang, "China's Third Plenum Reform Agenda: Winners and Losers," *International Business Times*, November 22, 2013, <http://www.ibtimes.com/chinas-third-plenum-reform-agenda-winners-losers-1481438>.
8. Hillary Clinton, "America's Pacific Century," *Foreign Policy*, October 11, 2011, [http://www.foreignpolicy.com/articles/2011/10/11/americas\\_pacific\\_century#sthash.1bsD5Qxc.dpbs](http://www.foreignpolicy.com/articles/2011/10/11/americas_pacific_century#sthash.1bsD5Qxc.dpbs).
9. United States Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense* (January 2012), 2.
10. Office of the Assistant Secretary of Defense for Public Affairs, "Shangri-La Security Dialogue Speech As Delivered by Secretary of Defense Leon E. Panetta," Shangri-La Hotel, Singapore, June 2, 2012, <http://www.defense.gov/speeches/speech.aspx?speechid=1681>.
11. Ely Ratner, "Rebalancing to Asia with an Insecure China," *The Washington Quarterly* 36 no. 2 (Spring 2013), 21-38.
12. Ely Ratner, "Has Foggy Bottom Forgotten Asia?," *Foreign Policy*, July 2, 2013, [http://www.foreignpolicy.com/articles/2013/07/02/john\\_kerry\\_asia\\_pivot\\_middle\\_east#sthash.WIPFjdHy.dpbs](http://www.foreignpolicy.com/articles/2013/07/02/john_kerry_asia_pivot_middle_east#sthash.WIPFjdHy.dpbs); Steve Holland and James Pomfret, "Obama cancels Asia tour over shutdown; raises questions on U.S. pivot," *Reuters*, October 4, 2013.
13. Elizabeth C. Economy, "Washington Rediscovered Asia," Council on Foreign Relations' Asia Unbound blog, November 26, 2013, <http://blogs.cfr.org/asia/2013/11/26/washington-rediscovered-asia/>.
14. "America's Place in the World 2013" (Pew Research Center, December 2013), 3-8; Ely Ratner and Thomas Wright, "America's not in decline—it's on the rise," *The Washington Post*, October 18, 2013.
15. United States National Intelligence Council, *Global Trends 2030: Alternative Worlds*, NIC 2012-001 (December 2012), iv-v.
16. Ely Ratner, "Learning the Lessons of Scarborough Reef," *The National Interest*, November 21, 2013, <http://nationalinterest.org/commentary/learning-the-lessons-scarborough-reef-9442>; Peter Mattis, "China's ADIZ: A Low-Risk Move," *The National Interest*, December 13, 2013, <http://nationalinterest.org/commentary/chinas-adiz-low-risk-move-9555>; Cronin, "China's Tailored Coercion."
17. Stephanie Kleine-Ahlbrandt, "Dangerous Waters: China-Japan Relations on the Rocks," *Asia Report* No. 245 (International Crisis Group, April 8, 2013), 12.
18. Cronin, "China's Tailored Coercion."
19. Patrick M. Cronin and Alexander Sullivan, "America and the South China Sea Challenge," *The Diplomat*, May 3, 2013, <http://thediplomat.com/2013/05/america-and-the-south-china-sea-challenge/>.
20. Patrick Cronin, Richard Fontaine and Ely Ratner, "An Asian Power Web Emerges," *The Diplomat*, June 14, 2013, <http://thediplomat.com/2013/06/an-asian-power-web-emerges/>.
21. Richard Fontaine, Patrick Cronin and Ely Ratner, "Asian Hedge Against China," *The Wall Street Journal*, December 5, 2013.
22. Patrick M. Cronin *et al.*, "The Emerging Asia Power Web: The Rise of Bilateral Intra-Asian Security Ties" (Center for a New American Security, June 2013).
23. Indeed, one motivating factor for the Asia power web is frustration with the inefficacy and slow development of multilateral arrangements.
24. Eighteen nations participated in a landmark military medicine joint exercise under the auspices of the ADMM+ in Brunei in June 2013. Brian Harding, "Don't Underestimate the ADMM+," *PacNet* No. 65R (Pacific Forum CSIS, August 19, 2013), <http://csis.org/files/publication/Pac1365R.pdf>.

25. Prak Chan Thul and Stuart Grudgings, "SE Asia meeting in disarray over sea dispute with China," Reuters, July 13, 2012, <http://www.reuters.com/article/2012/07/13/us-asean-summit-idUSBRE86COBD20120713>.
26. Deep Pal, "A Code of Conduct for the South China Sea?," *The Diplomat*, September 25, 2013, <http://thediplomat.com/2013/09/a-code-of-conduct-for-the-south-china-sea/>.
27. Toko Sekiguchi and Yoshio Takahashi, "Japan, Asean Pledge to Work More Closely Together," *The Wall Street Journal*, December 15, 2013.
28. Wayne Arnold and Tomasz Janowski, "As investors mull QE finale, Asia's miracle shows signs of wear," Reuters, August 20, 2013, <http://uk.reuters.com/article/2013/08/20/uk-economy-asia-idUKBRE97J0XZ20130820>.
29. Peter Orszag, "In China, Slowdown Is a Bigger Danger Than Growth," Bloomberg View, January 15, 2013, <http://www.bloomberg.com/news/2013-01-15/in-china-slowdown-is-a-bigger-danger-than-growth.html>; Le Hong Hiep, "Performance-based Legitimacy: The Case of the Communist Party of Vietnam and *Doi Moi*," *Contemporary Southeast Asia* Vol. 34 No. 2 (2012), 145-72.
30. Bruce Bennett, "Preparing for North Korean Regime Collapse," RAND Corporation (November 6, 2013), <http://www.rand.org/multimedia/video/2013/10/16/preparing-north-korean-regime-collapse.html#in-brief-bruce-bennett-on-preparing-for-north-korean-regime-collapse>.
31. Thomas Fuller, "Thai Leaders Declare State of Emergency in Bangkok," *The New York Times*, January 21, 2014, [http://www.nytimes.com/2014/01/22/world/asia/thailand.html?ref=world&\\_r=0](http://www.nytimes.com/2014/01/22/world/asia/thailand.html?ref=world&_r=0); James Bean, "Thailand's Little-Known Peace Process," *The Diplomat*, July 31, 2013, <http://thediplomat.com/2013/07/thailands-little-known-peace-process/>.
32. "Riot in Little India spontaneous, says Singapore Prime Minister," *The Hindu*, December 14, 2013.
33. Geoff Wade, "Singapore after Lee Kuan Yew," East Asia Forum, <http://www.eastasiaforum.org/2013/09/13/singapore-after-lee-kuan-yew/>.
34. "Fresh violence in Rakhine state as Burma leader visits," *BBC News*, October 1, 2013, <http://www.bbc.co.uk/news/world-asia-24354159>.
35. *Global Trends 2030*, 20-22.
36. *Managing Asian Cities: Sustainable and inclusive urban solutions* (Asian Development Bank, 2008), 1-2.
37. *Global Trends 2030*, 26-37.
38. United Nations Office for Disaster Risk Reduction, *The Hyogo Framework for Action in Asia and the Pacific, 2011-2013* (2013), 5-6.
39. U.S. Energy Information Administration, *International Energy Outlook 2013*, DOE/EIA-0484(2013), 180.
40. *Asian Development Outlook 2013: Asia's Energy Challenge* (Asian Development Bank, 2013), 53-55.
41. *Asian Development Outlook 2013*, 56-7.
42. Philip Andrews-Speed, "Do Overseas Investments by National Oil Companies Enhance Security at Home? A View from Asia," in *Oil and Gas for Asia: Geopolitical Implications of Asia's Rising Demand*, Special Report #41 (National Bureau of Asian Research, September 2012), 32-33.
43. U.S. Energy Information Administration, *Annual Energy Outlook 2014 Early Release Overview*, DOE/EIA-0383ER(2014), 2.
44. Andrew Erickson and Austin Strange, "China and the International Antipiracy Effort," *The Diplomat*, November 1, 2013.
45. Andrew S. Erickson and Austin M. Strange, "No Substitute for Experience: Chinese Antipiracy Operations in the Gulf of Aden," *China Maritime Studies* No. 10 (U.S. Naval War College, November 2013), 187-89.
46. J. Michael Cole, "Militarization of the Arctic Heats Up, Russia Takes the Lead," *The Diplomat*, December 6, 2013, <http://thediplomat.com/2013/12/militarization-of-the-arctic-heats-up-russia-takes-the-lead/>; David Curtis Wright, "Claiming the Arctic," *Defense News*, July 1, 2012.
47. Wang Tao, "Asia's Admission Into the Arctic Council," Carnegie Endowment for International Peace blog, October 15, 2013, <http://carnegieendowment.org/2013/10/15/asia-s-admission-into-arctic-council/gqnd?reloadFlag=1>.
48. See Jan van Tol et al., "AirSea Battle: A Point-of-Departure Operational Concept" (Center for Strategic and Budgetary Assessments, 2010), Chapter 2.
49. James R. Holmes, "Surface Combat Fleets: Obsolete?," *The Diplomat*, March 13, 2013, <http://thediplomat.com/2013/03/surface-combat-fleets-obsolete/>; Terrence K. Kelly, "Employing Land-Based Anti-Ship Missiles in the Western Pacific" (RAND Corporation, 2013); Barry D. Watts, "The Evolution of Precision Strike" (Center for Strategic and Budgetary Assessments, 2013), 31-34.
50. Andrew Krepinevich, "Get Ready for the Democratization of Destruction," *Foreign Policy*, August 16, 2011.
51. U.S. Department of State, *Country Reports on Terrorism 2012* (May 2013), Chapter 2.
52. *Global Trends 2030*, 11-12.
53. Yossi Sheffi, "Will 3D printing kill the supply chain?," World Economic Forum blog, August 2, 2013, <http://forumblog.org/2013/08/will-3d-printing-kill-the-supply-chain/>.
54. Myra Macdonald, "Asia's defense spending overtakes Europe's: IISS," Reuters, March 14, 2013, <http://www.reuters.com/article/2013/03/14/us-security-military-iiis-idUSBRE92D0EL20130314>; Veeramalla Anjaiah, "Growth spurs Asia's military modernization," *The Jakarta Post*, June 1, 2013, <http://www.thejakartapost.com/news/2013/06/01/growth-spurs-asia-s-military-modernization.html>.
55. Sandra I. Erwin, "U.S. Firms Rule Global Arms Market, But Dominance May Not Last," *National Defense*, December 8, 2013, <http://www>.



nationaldefensemagazine.org/blog/Lists/Posts/Post.aspx?ID=1359; Harsh V. Pant, "Challenges to India's indigenous naval buildup," *The Japan Times*, September 22, 2013, <http://www.japantimes.co.jp/opinion/2013/09/22/commentary/challenges-to-indias-indigenous-naval-buildup/#.UrDNTyhqqPE>; "Global Insider: Defense Exports an Essential Part of 'Global Korea,'" *World Politics Review*, October 21, 2013, <http://www.worldpoliticsreview.com/trend-lines/13318/global-insider-defense-exports-an-essential-part-of-global-korea>.

56. Benjamin Schreer, "Moving beyond ambitions? Indonesia's military modernization" (Australian Strategic Policy Institute, November 2013).

57. Richard Jacobson, "Modernizing the Philippine Military," *The Diplomat*, August 22, 2013, <http://thediplomat.com/2013/08/modernizing-the-philippine-military/>.

58. Wu Shang-su, "Typhoon Haiyan and the Philippine Military," *The Diplomat*, November 25, 2013, <http://thediplomat.com/2013/11/typhoon-haiyan-and-the-philippine-military/>.

59. Wendell Minnick, "In Asia, C4ISR Market is Growing," *Defense News*, November 12, 2012, <http://www.defensenews.com/article/20121112/DEFREG03/311120010>.

60. Examples include China's J-20 and J-31 fighters and stealthy drone programs, as well as the U.S. F-35 Joint Strike Fighter and Northrop Grumman's high-altitude, long-endurance UAV, the RQ-4 Global Hawk. Australia and Japan are committed to substantial F-35 buys, with the Republic of Korea tentatively committed to the platform and Singapore interested in acquiring the aircraft some years out. The acquisition of three Global Hawks is centerpiece of Japan's recent defense modernization plan.

61. Shane Bilsborough, "China's Emerging C4ISR Revolution," *The Diplomat*, August 10, 2013, <http://thediplomat.com/2013/08/chinas-emerging-c4isr-revolution/>; "Surya's Chariots: India's AWACS Programs," *Defense Industry Daily*, March 5, 2013, <http://www.defenseindustrydaily.com/indian-awacs-moving-forward-on-2-fronts-04855/>; "Japan Orders Upgrades for its 4 E-767 AWACS," *Defense Industry Daily*, October 13, 2013, <http://www.defenseindustrydaily.com/japan-orders-4-e767-awacs-radar-mission-upgrade-kits-for-147m-02215/>.

62. "More than the Sum of Its Parts: Dutch SIGMA Ships for Vietnam," *Defense Industry Daily*, November 5, 2013, <http://www.defenseindustrydaily.com/more-than-the-sum-of-its-parts-dutch-sigma-ships-for-vietnam-07173/>; Schreer, "Moving beyond ambitions."

63. Minnick, "In Asia, C4ISR Market is Growing."

64. *Ibid.*; "SAF able to see first and do more: Defence Minister," *AsiaOne*, April 2, 2012, <http://news.asiaone.com/News/Latest+News/Singapore/Story/A1Story20120402-337300.html>.

65. Todd Harrison, "The Future of MILSATCOM" (Center for Strategic and Budgetary Assessments, 2013), 8-9, 30; "Asia's year in space triggers applause—and also worry," *The Japan Times*, December 17, 2013, <http://www.japantimes.co.jp/news/2013/12/17/world/>

66. "Asia's year in space triggers applause—and also worry/#.UrHNMIhqqPE;" JAXA to get national security role; NASA password leaked," *The Japan Times*, January 15, 2012, <http://www.japantimes.co.jp/news/2012/01/15/news/jaxa-to-get-national-security-role-nasa-password-leaked/#.UrHNMIhqqPE>.

67. "Small is Beautiful: US Military Explores Use of Microsatellites," *Defense Industry Daily*, June 30, 2011, <http://www.defenseindustrydaily.com/Small-Is-Beautiful-US-Military-Explores-Use-of-Microsatellites-06720/>.

68. Mike Yeo, "Aircraft Carriers or Not? Flattops in the Pacific," *The Diplomat*, September 8, 2013, <http://thediplomat.com/2013/09/aircraft-carriers-or-not-flattops-in-the-pacific/>.

69. "China's second aircraft carrier will be 'larger,'" Xinhua, April 23, 2013, [http://news.xinhuanet.com/english/china/2013-04/24/c\\_124622000.htm](http://news.xinhuanet.com/english/china/2013-04/24/c_124622000.htm).

70. See Richard A. Bitzinger, "Recent Developments in Naval and Maritime Modernization in the Asia-Pacific: Implications for Regional Security," in *The Chinese Navy: Expanding Capabilities, Evolving Roles*, ed. Philip C. Saunders et al. (Institute for National Strategic Studies, 2011), 23-40.

71. John T. Bennett, "New Arms are Popping Up All Over the Pacific. HASC Told That's 'Worrisome,'" *Defense News' Intercepts* blog, July 24, 2013, <http://blogs.defensenews.com/intercepts/2013/07/new-arms-are-popping-up-all-over-the-pacific-hasc-told-thats-worrisome/>.

72. Kyle Mizokami, "Asia's Submarine Race," U.S. Naval Institute News blog, November 13, 2013, <http://news.usni.org/2013/11/13/asias-submarine-race>.

73. Zachary M. Hosford and Ely Ratner, "The Challenge of Chinese Revisionism: The Expanding Role of China's Non-Military Maritime Vessels," *East and South China Seas Bulletin* 8 (Center for a New American Security, February 2013).

74. "China scrambles jets in air zone to monitor US and Japanese planes," *BBC News*, November 29, 2013, <http://www.bbc.co.uk/news/world-asia-25155605>.

75. Shawn Brimley, Ben Fitzgerald, and Ely Ratner, "The Drone War Comes to Asia," *Foreign Policy*, September 24, 2013, [http://www.foreignpolicy.com/articles/2013/09/17/the\\_drone\\_war\\_comes\\_to\\_asia#sthash.8zuakNys.dpbs](http://www.foreignpolicy.com/articles/2013/09/17/the_drone_war_comes_to_asia#sthash.8zuakNys.dpbs).

76. "Tanker and Transport Aircraft," *Asian Military Review*, October 1, 2012, <http://www.asianmilitaryreview.com/tanker-and-transport-aircraft/>.

77. Cronin, "Japan's New Defense Strategy;" Thomas Lonergan, "Amphibious capability is exactly what Australia's maritime strategy needs," *ASPI's Strategist* blog, November 7, 2013, <http://www.aspi.org.au/amphibious-capability-is-exactly-what-australias-maritime-strategy-needs/>.

78. "SDF joins U.S. Marines in California amphibious assault exercise," *Asahi Shimbun*, June 19, 2013, [http://ajw.asahi.com/article/behind\\_news/politics/AJ201306190069](http://ajw.asahi.com/article/behind_news/politics/AJ201306190069).

79. Mark Stokes, "China's Evolving Conventional Strategic Strike Capability" (Project 2049 Institute, September 14, 2009), 1-6.

79. Cronin, "Japan's New Defense Strategy;" Sung-Won Shim, "U.S., South Korea agree on longer range ballistic missiles," Reuters, October 7, 2012, <http://www.reuters.com/article/2012/10/07/us-korea-usa-missile-idUSBRE89602J20121007>.
80. "Air Force to receive BrahMos by 2015," *Business Standard*, November 22, 2013, [http://www.business-standard.com/article/companies/air-force-to-receive-brahmos-by-2015-113112100703\\_1.html](http://www.business-standard.com/article/companies/air-force-to-receive-brahmos-by-2015-113112100703_1.html).
81. Jatindra Dash, "India tests Agni-V missile with range as far as Beijing," Reuters, September 15, 2013, <http://in.reuters.com/article/2013/09/15/india-missile-agniv-china-drdo-idINDEE98E02K20130915>.
82. Rachel Oswald, "Efforts to Build East Asia Antimissile Framework Stymied by Distrust" *Global Security Newswire*, May 14, 2013, <http://www.nti.org/gsn/article/efforts-build-east-asia-antimissile-framework-stymied-distrust/>.
83. Lora Saalman, "China's Evolution on Ballistic Missile Defense," Carnegie Endowment for International Peace blog, August 23, 2012, <http://carnegieendowment.org/2012/08/23/china-s-evolution-on-ballistic-missile-defense/dkjp>.
84. Brian Weeden, "Time for Obama to Go Public on China's ASAT Program," *Defense News*, June 2, 2013, <http://www.defensenews.com/article/20130602/DEFREG/306020009/>.
85. Harrison, "The Future of MILSATCOM."
86. Adam Elkus, "Rise of The Asian Cyber Armies," U.S. Naval Institute's News blog, Wednesday, August 8, 2013, <http://news.usni.org/2012/08/08/rise-asian-cyber-armies>; Tobias Feakin, "What's in a name change? Cyber in the Defence White Paper," ASPI Strategist blog, May 3, 2013, <http://www.aspistrategist.org.au/whats-in-a-name-change-cyber-in-the-defence-white-paper/>; Jermyn Chow, "SAF sets up new 'cyber army' to fight digital threats," *Straits Times*, June 30, 2013, <http://www.straitstimes.com/breaking-news/singapore/story/saf-sets-new-cyber-army-fight-digital-threats-20130630>.
87. Scott McGehee, "PASOC 2013 Explores Security, Partnerships and Special Operations Forces," Asia-Pacific Defense Forum, July 1, 2013, [http://apdforum.com/en\\_GB/article/rmiap/articles/print/features/2013/07/01/feature-pr-16](http://apdforum.com/en_GB/article/rmiap/articles/print/features/2013/07/01/feature-pr-16).
88. Mandip Singh, "China's Defense Budget: 2013-14," (Institute for Defence Analyses and Studies, March 18, 2013), [http://www.idsa.in/idsacomments/ChinasDefenceBudget2013-14\\_msingh\\_180313](http://www.idsa.in/idsacomments/ChinasDefenceBudget2013-14_msingh_180313).
89. Cronin, "Japan's New Defense Strategy;" Australian Department of Defence, *Defence White Paper 2013* (2013), 75-78.
90. I am by no means the first person to suggest this step. See, for example, Ely Ratner, "Resident Power: Building a Politically Sustainable U.S. Military Presence in Southeast Asia and Australia" (October 2013), 31.

## About the Center for a New American Security



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The aircraft carrier *U.S.S Ronald Reagan* transits the Pacific Ocean with ships assigned to Rim of the Pacific 2010 combined task force as part of a photo exercise north of Hawaii.

(MASS COMMUNICATION SPECIALIST 3RD CLASS DYLAN MCCORD/U.S. Navy)