

AN INTERVIEW WITH ANDREW S. ERICKSON

Building an Active, Layered Defense Chinese Naval and Air Force Advancement

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As China re-emerges as a global power, it has placed great emphasis on bolstering the capabilities of its naval and air forces. In recent years, this has been reflected in the rapid procurement and development of advanced aerial and maritime platforms and capabilities, aimed at bringing China's navy and air forces into the modern military age. NBR asked Andrew S. Erickson (U.S. Naval War College) for his thoughts on the implications of China's naval and air force improvement. In the first half of a two-part interview, Dr. Erickson discusses the motivations driving these enhancements and what these new capabilities reveal about China's strategy toward the United States.

Andrew S. Erickson is the author of "China's Modernization of Its Naval and Air Power Capabilities," which will appear in the forthcoming book Strategic Asia 2012–13: China's Military Challenge, the twelfth volume in NBR's Strategic Asia series. This year's volume assesses China's growing military capabilities, the perceptions and responses of China's neighbors in light of its increasing military strength, and the implications for U.S. interests in the Asia-Pacific. Strategic Asia 2012–13: China's Military Challenge will be released on October 3.

What are China's strategic motivations for modernizing the People's Liberation Army (PLA) Navy and Air Force? How have these goals changed or evolved over the past two decades?

Today, China's naval and air forces are finally on the verge of giving the country's leaders reliable instruments of national power. This includes army aviation, which is now a solid piece of the ground force's foundation. Though aviation in particular has long been a tool of national consolidation and development, the PLA Navy (PLAN) and Air Force (PLAAF) started from virtually nothing, and they have played minimal to nonexistent

roles in most of China's twentieth-century military campaigns. That may now be changing as investments, access to foreign technology, and development of the domestic defense industry—all of which have grown markedly since the 1990s—yield increasingly modern forces.

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Like many nations, the People's Republic of China (PRC) has long sought to maintain domestic order and defend itself against external threats. More exceptionally, it seeks to regain its historical status as a preeminent great power, as well as territories that it lost during an aberrant period of weakness. The end of the Cold War and China's rapid economic growth enabled the PRC to move from focusing almost exclusively on homeland defense to developing a second layer of advanced capabilities for the "near seas" or "three seas" (the Yellow, East China, and South China seas). Demarcated by the first island chain, the near seas are home to all of China's unresolved territorial and maritime claims—save for disputes over remote areas with India and a limited dispute with Bhutan. By far the most important of Beijing's outstanding political and geostrategic disputes is the status of Taiwan. The island has long been the impetus behind PLA development and planning—particularly in the maritime and aerospace dimensions.

Under the leadership of Hu Jintao, a nascent third layer of out-of-area nontraditional security operations has been added to China's naval and air force development as part of a set of "new historic missions." So far these operations have primarily involved international naval diplomacy and twelve antipiracy task forces in the Gulf of Aden conducted by the PLAN, and a limited evacuation of Chinese nationals from Libya and relief assistance to Pakistan and Thailand conducted by the PLAAF. But this new focus foreshadows more far-reaching, if limited, efforts. While Beijing is pursuing all three layers of military development simultaneously, their prioritization and effectiveness decrease markedly with distance from mainland China, a distinction that is likely to persist

How do the capabilities of the PLAN and the PLAAF currently compare with those of the U.S. Navy and U.S. Air Force in the Asia-Pacific?

The absolute capabilities of China's naval and air forces remain significantly below those of their U.S. counterparts in the Asia-Pacific region as a whole. However, China has entirely different strategic goals than the United States, and hence requires different capabilities to address them. For example, in the

unfortunate event of conflict, select U.S. forces would have to cross thousands of miles of ocean and penetrate significant anti-access/area denial (A2/AD) defenses to engage Chinese forces, while many U.S. forces would remain elsewhere to fulfill ongoing global responsibilities. Chinese forces, by contrast, would not have to move significantly and would enjoy a defender's advantages.

A side-by-side, system-by-system comparison is therefore not the best way to gauge the PLAN and PLAAF. A better question to ask is how Beijing's ability to meet its strategic goals compares with Washington's ability, and how this is changing over time. The short answer is that Beijing has started far behind, but is closing the gap rapidly. By specifically and systematically targeting physics-based weaknesses in U.S. military platforms, China is quickly increasing its ability to hold them at risk. Here the contributions of China's land-based Second Artillery Force in threatening U.S. military facilities in the region, and increasingly ships underway, enter the equation as well.

What does China perceive to be the key weaknesses of the U.S. military position within East Asia? How has its military modernization program sought to exploit these weaknesses?

Chinese strategists believe that the post-Cold War U.S. approach of employing mostly manned networked air strikes with short-range weapons from land bases and aircraft carrier strike groups can be rendered ineffective against a large, increasingly advanced and capable power such as China. While modernizing its navy and air force, China is also developing even more potent "anti-navy" and "anti-air force" capabilities. This entails using missiles, including many land-based mobile varieties, to hold regional air bases, naval bases, and carrier strike groups at risk while making it prohibitively expensive to penetrate China's integrated air defense system. The intended result is to deter U.S. forces from entering key near-seas areas, and thereby force them back beyond the operational ranges of their platforms and armaments.

Against this emerging military backdrop, Chinese decision-makers believe that they can exploit what they consider to be a significant asymmetry of interest

between Beijing and Washington concerning the status and outcome of near-seas disputes and in regional influence more broadly. In addition to the penumbra of military capability, Beijing is using economic and political sticks and carrots in an attempt to convince its neighbors and the United States that China is the natural leader of East Asia and that its interests must receive due deference, that efforts to prevent such an order from re-emerging will fail, and that embracing such an inevitability will be beneficial for all concerned. While some in the PLA may hope to fight and prove their military strength, their political masters in Beijing hope to “win without fighting” by using the development of China’s military to catalyze desired political outcomes without having to employ it in large-scale warfare.

Washington has a different view. It believes that the Asia-Pacific should remain part of an integrated system based on global commons—open in order and access, and free from the threat of force to resolve differences. To maintain this status quo amid rising Chinese power and fiscal realities, the Obama administration is engaged in “rebalancing” to refocus on the Asia-Pacific as a priority strategic region. It remains to be seen, however, whether resources will match rhetoric. Having upped the ante by pushing back—e.g., in the South China Sea, an area that matters (and will continue to matter) greatly to China’s leaders and populace—the administration must avoid “hollow” rebalancing, which would be the worst of both worlds. Strategy involves prioritization and difficult choices. Rebalancing will thus be an important challenge for this, and succeeding, administrations.

Over the past several years, much has been made about an emerging Chinese A2/AD capability and its implications for the balance of power in the western Pacific. What does this development portend for the future of U.S. interests in the Asia-Pacific?

A2/AD (anti-access/area-denial) is a U.S. military term used to generally describe the capabilities necessary to keep forces out of a given theater, or to restrict their operations therein. While not China-specific, A2/AD has been used by the United States to describe China’s increasing capacity to hold U.S. forces (and their allied or friendly counterparts) at risk should

they seek to intervene in contested areas proximate to China. The term is misleading in the sense that China cannot actually prevent U.S. forces from entering these areas, but it can increasingly threaten them with damage or destruction once there, or even once approaching. The focus of China’s A2/AD capabilities remains the near seas but is gradually extending toward the second island chain to cover the approaches to the near seas and thereby provide strategic depth.

What the United States views as A2/AD, China views as “active defense” (*jiji fangyu*) or “counterintervention” (*fan ganshe*), a set of capabilities and actions to prevent interference in what Beijing regards as its core strategic interests. Counterintervention may be regarded as a broader concept than A2/AD in that it has less to do with specific locations and platforms than it does with larger effects and outcomes. At the operational level, counterintervention may involve “nonlinear, noncontact, and asymmetric” (*san fei*) approaches that match Chinese strengths against U.S. weaknesses. At the tactical level, it may involve “active strategic counterattacks on exterior lines” (*jiji de zhanlüe waixian fanji zuozhan*). It may also employ nonmilitary means, including as part of what U.S. policymakers would term a “whole-of-government approach”—i.e., Beijing applying political pressure to restrict U.S. regional basing options.

What are the major technological, operational, and structural bottlenecks the PLAN and PLAAF must still pass through in order to become a truly modern force? How are these challenges being addressed?

This begs the question of what a “truly modern” force is. The gold standard remains the U.S. military, but it faces a unique set of requirements that no other nation matches comprehensively. Given the systems that China is developing and acquiring, the PLA appears to have a different definition of “modern.” At present, for instance, it does not need high-end power-projection capabilities. The PLA already possesses cutting-edge missile technology and systems. It is not yet capable of sophisticated joint operations or complex real-time command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR), but for high-priority near-seas missions, work-arounds

may be available involving land-basing, temporal and spatial deconstriction of assets, and communications through secure fiber optic cable networks and high-powered line-of-sight. Such approaches may already be sufficient to convince leaders in Taiwan that the PLA has the capability to coerce the island while deterring U.S. intervention.

That said, for China to continue to improve its A2/AD capabilities, it must surmount several hurdles. Aeroengines, for example, are closely linked to an aircraft's overall performance and stealth. Together with avionics and flight-control systems to some degree, this technology remains a major gap in Chinese aircraft development and production capabilities—one that significantly constrains the effectiveness of military aircraft such as the J-20. Coordination of aircraft and surface-to-air missile operations represents another possible challenge, although the aforementioned asset-deconstriction procedures may be employed as a stopgap measure. Other potential hurdles include the mastery of antisubmarine warfare and amphibious operations, where the PLA retains significant limitations at present. It is not clear, however, to what extent Chinese planners believe these capabilities are vital to achieving their present objectives

What are the prospects that China will develop the ability to project power over long distances? What deficiencies would it need to address in order to achieve this goal?

Deploying high-end combat capabilities in the far seas is not a Chinese priority and is unlikely to become one for the foreseeable future. Beijing retains too many unresolved territorial and maritime claims in the near seas to allow major strategic focus to coalesce far beyond that area. At the same time, however, China

is slowly developing a less-intense tertiary layer of naval and air force capabilities to conduct presence-enhancing naval diplomacy and other nontraditional missions farther afield. China's naval and air forces do not offer robust high-end capabilities at such distances; only Second Artillery missiles do, but they can only execute a narrow range of missions under very specific conditions. To enable truly robust out-of-area operations, China must increase its capabilities in satellite navigation and C4ISR, antisubmarine warfare, area air defense, long-range air power, production of military ships and aircraft, at-sea replenishment, remote repair, operational readiness, doctrine, training, human capital, and overseas facilities. Thus far, Beijing has many limitations in these areas; some voluntary, some less so. These will be key indicators to monitor. ♦

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