



“MONEYBALL-ING” THE PHILIPPINES’ DEFENSE ARCHITECTURE

By Felix K. Chang



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The ongoing standoff between China and the Philippines in the disputed waters around Scarborough Shoal should serve as a wakeup call for Manila to reassess its external defenses. Since Chinese government ships blocked Philippine authorities from arresting Chinese fishermen accused of illegal activities near the shoal in April, the standoff has fluctuated in its intensity. But it is clear to most observers that if China chose to use force to settle the standoff, the Philippine armed forces could offer scant resistance. Its navy has no ships equipped with anti-ship cruise missiles or any defenses against them; and its air force has no jet combat aircraft left in its inventory.

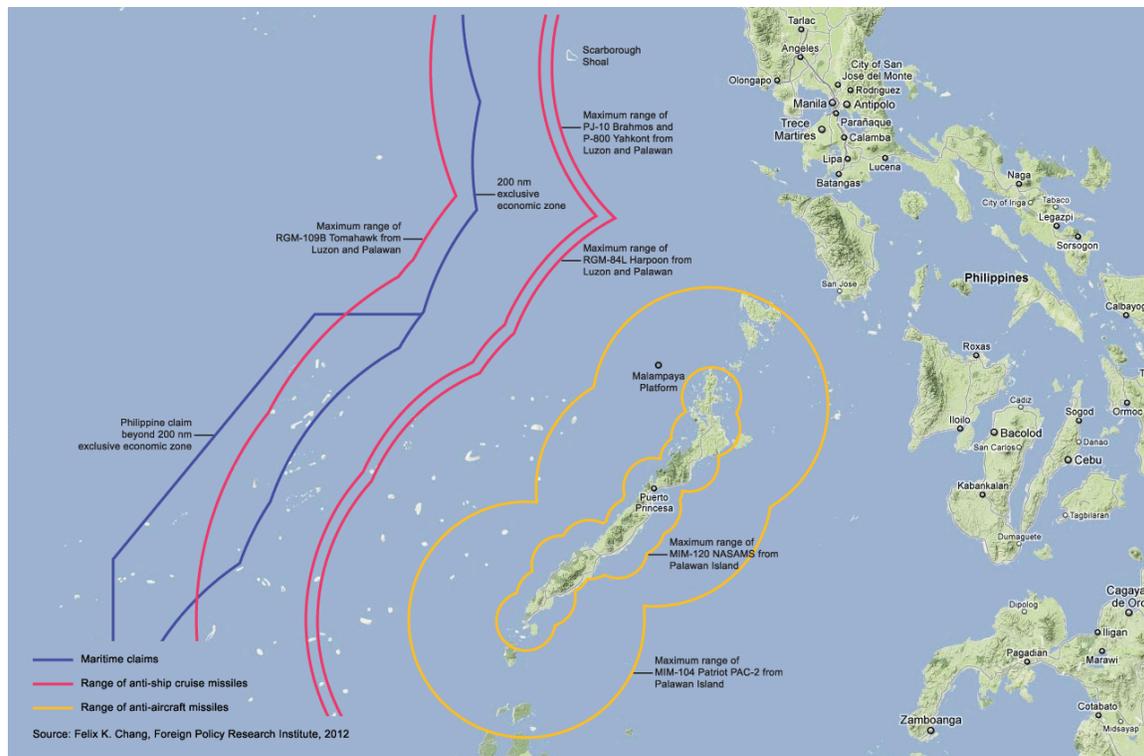
In contrast, after a two-decade modernization, the Chinese navy has become a formidable power in the South China Sea. While its anti-submarine warfare capabilities may still lag, the navy has greatly improved its capacity to defeat surface combatants. Its ships and submarines are now armed with advanced anti-ship cruise missiles and over-the-horizon targeting systems. At the same time, it has markedly enhanced its ability to protect its ships at sea with better shipboard anti-air missile defenses, long-range Su-30MK2 fighters, and by the end of 2012 its first aircraft carrier. Beyond that, China's Second Artillery Corps can project or, more accurately, hurl power from Chinese shores with an array of conventional ballistic missiles that no Southeast Asian country can effectively counter.

Hence, the Philippines would find it hard to resist China militarily, even in waters close to the Philippine coast. That has led Manila not only to lean heavily on its defense relationship with the United States but to fund serious investments in its armed forces for the first time in decades to create a credible external defense capacity. As part of that effort, it has focused on procurement of surplus American arms and economical combat systems from other countries, in recognition of its still-constrained defense budget.

Even so, the sort of equipment, manning, and skills that the Philippine military can afford to acquire and maintain preclude the development of a force that can directly challenge China's burgeoning sea power—which includes not only modern aircraft, ships, and submarines, but also a growing naval base at Yalong Bay on Hainan Island from which its navy can quickly surge forces to South China Sea flashpoints. Consequently, like the 2002 Oakland Athletics whose revenue-strapped management adopted an unconventional approach to achieve a winning baseball season, the Philippine government would be wise to seriously consider an asymmetric design for its external

defense architecture that takes full advantage of its geographic proximity to the contested waters.¹

The Philippine island of Luzon is only 240 km from Scarborough Shoal, and Palawan Island lies 450 km from even the most distant Philippine claims in the Spratly group. From Luzon and Palawan, mobile land-based anti-ship cruise missiles could cover most of the disputed waters surrounding these islands. Such missiles include America's RGM-84L Harpoon, India's BrahMos, and Russia's P-800 Yakhont. Denmark, Egypt, South Korea, and a small number of other countries have long used RGM-84 anti-ship cruise missiles as part of their coastal defenses; and Vietnam recently ordered two batteries of P-800 missiles to protect its South China Sea claims. Four batteries of such anti-ship missiles mounted on wheeled or tracked vehicles and dispersed along Palawan's long road network could satisfy the Philippines' need to deliver the massed firepower that could penetrate Chinese naval defenses. Moreover, their mobility would reduce the possibility that China could suppress them with either air or ballistic missile strikes.



With such an external defense architecture, the Philippine armed forces could deliver the same amount of ordinance against a maritime adversary as a more expensive traditional approach that relies on strike aircraft and ships. That is because in the air only a portion of Philippine strike aircraft could be committed to an attack against a Chinese naval force, given that a number of them would first need to suppress the force's air cover. Meanwhile, at sea Philippine warships would have to risk becoming potential casualties to Chinese anti-ship cruise missiles before they could even launch their own attack. Finally, whatever losses Philippine forces would suffer in their first strike would reduce their capacity to mount a full second strike. Thus, without an adequate number of combat platforms, it is doubtful whether the Philippine military could overcome the defenses of a Chinese naval force with a traditional approach.

A coastal defense approach could not only cover the Scarborough Shoal area, but also better ensure the safety of the vital Malampaya Natural Gas and Power Project, which supplies nearly half of Luzon's electricity. Though the most distant Philippine-claimed areas would fall outside the maximum range of current land-based systems, their lower procurement and maintenance costs would allow the Philippine military to program for later procurement of longer-range systems as they become more affordable.

A detailed financial comparison of these two external defense approaches clearly demonstrates that a traditional approach would cost over 50 percent more to procure than one focused on mobile land-based missiles. The former would require modern strike aircraft and stealthy oceanic patrol vessels. Even if the Philippines were to acquire less-

¹ Michael Lewis, *Moneyball: The Art of Winning an Unfair Game* (New York: W.W. Norton & Company, 2003).

expensive kit than its usual American equipment, it would still need a more complex infrastructure in terms of skills and equipment to accommodate them.² These costs could total as much as \$3.8 billion to procure. In contrast, an asymmetric approach that principally relies on land-based cruise missile batteries, supported by a mixture of land-based MIM-104 Patriot PAC-2 and MIM-120 NASAMS air defense systems, and a smaller complement of air superiority fighters and cutters would cost only about \$2.4 billion.

Both external defense approaches that were modeled have the potential to launch 96 AGM/RGM-84L in two strikes against ships at sea. But a coastal defense approach could do so at an acquisition cost one-third lower than a traditional one. That becomes even clearer after considering the losses that a traditional force could sustain to deliver its first strike, whereas a coastal defense force would remain largely intact to deliver a full second strike. Better still, a coastal defense force likely would require a smaller budget to procure, operate, and maintain, since the Philippine armed forces would not have to develop a wholly new infrastructure to accommodate the more technically complex combat systems. Rather, it could build upon the skills that already exist in the Philippine armed forces, such as aviation assets based around the S-70 helicopter platform.

Indeed, the Philippines must also weigh the long-term operational and maintenance costs that it would have to bear to sustain a certain level of operational readiness for its air and naval forces. Since many of China's past military actions in the South China Sea have been unanticipated, one could argue that the Philippines should maintain a higher state of operational readiness, especially for a smaller defensive force. But a high level of operational readiness carries with it a higher financial burden to ensure that equipment is combat-ready and personnel are adequately trained and available for immediate deployment. To maintain such a high readiness, a traditional force of strike aircraft and ships would likely cost more than a coastal defense force of land-based batteries and helicopters whose operation requires far fewer personnel and equipment that involves tracked carriers or trucks with missile canisters.

While the Philippine government has begun to make more resources available to its armed forces as Chinese assertiveness has increased in the South China Sea, that increased funding may not last, given the country's many other pressing priorities. So the Philippine military must use its new budgetary authority with care and foresight. Certainly after decades of neglect, the Philippine air force and navy may have service-centric wish lists that have long gone unfilled. But hastily gorging on large purchases may be militarily and fiscally risky in the long run, especially if the new acquisitions prove costly to maintain and preclude the later procurement of other beneficial capabilities.

The Philippine government's new capabilities-based defense budgeting process offers it an opportunity to create an effective external defense force. Ultimately, such a force is necessary for the Philippines to maintain its maritime claims in the contested waters of the South China Sea. Even if never used, it provides Manila with the leverage to enter into territorial negotiations from a position of greater strength rather than relative weakness. Otherwise, the Philippines will remain reliant on the benevolence of outside powers, like Japan and the United States, whose support is important but whose ability or willingness to intervene may not materialize when needed.

As envisioned, the Philippines could build a capable yet affordable external defense force by eschewing a traditional kit of strike aircraft and ships, and instead pursue an architecture designed around mobile coastal defense batteries equipped with long-range anti-ship missiles and protected by an integrated air defense umbrella. Such an externally strategic defense concept would allow Philippine forces to create a credible deterrent in the South China Sea with lower procurement, maintenance, and operational readiness costs than a traditional force would require. Those lower operating costs would help ensure the sustainability of the Philippines' newly acquired combat capabilities long into the future.

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² Gareth Jennings, "Philippines considers non-US fighter types over concerns about sustainment costs," *Jane's Defence Weekly*, May 18, 2012.