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RSIS COMMENTARIES

Making a Comeback?
Aircraft Carriers in the Asia-Pacific

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The aircraft carrier appears to be making something of a comeback among Asia-Pacific navies. The reintroduction of carriers to regional navies could significantly reorient the balance of power and greatly affect warfighting in the Asia-Pacific.

OVER THE past decade, Asian-Pacific navies have experienced a significant, if not unprecedented, expansion. This build-up has been quantitative, but more importantly, qualitative as well. From Japan to Southeast Asia to India, regional maritime forces have been adding capabilities that they previously lacked – in particular, for force projection and expeditionary operations. In this regard, is it time to ask to the question: is the aircraft carrier making a comeback?

The Return of the Carrier?

Long written off by some as a bulky, oversized "cruise missile magnet," the aircraft carrier seems to be enjoying a new lease-of-life as of late. Japan was stripped of its carriers after World War II, and Australia scrapped the *HMAS Melbourne* in the early 1980s. Currently, only two nations in the Asia-Pacific operate carriers with fixed-wing aircraft: India has one 50-year-old ex-British carrier, while Thailand operates the "pocket carrier," *Chakri Nareubet*. Both vessels can only operate aging *Harrier* jump jets, as they lack launch catapults for conventional fighter aircraft.

This may be changing, however. The Indian Navy (IN) is in the process of acquiring two new (or newish) full-deck aircraft carriers. It has acquired the 45,000-tonne *Admiral Gorshkov*, a Soviet-built, Kiev-class carrier that was laid down in 1978 and commissioned into the Soviet Navy in 1987. After the collapse of the Soviet Union, the *Gorshkov* was decommissioned in 1996 and sold to India in 2004.

Under the terms of the sale, Russia is providing the carrier for free, while India is paying the Russians US$974 million to extensively refit and upgrade the vessel to a STOBAR (short take-off but assisted recovery) configuration. This entails stripping off the weaponry from the ship's foredeck and adding a "ski-jump" to the bow and three arrestor wires on the landing deck. In addition, India will spend

another US$700 million on the aircraft and weapons systems, including twelve MiG-29K "Fulcrum-D" fighter jets.

The IN is also building its own Indigenous Aircraft Carrier (IAC), formerly known as the Air Defence Ship. The IAC, designated the INS *Vikrant*, is a 37,500-tonne vessel, also utilizing a STOBAR arrangement of ski-jump and arrestor wires, and will operate either the MiG-29K or India's indigenous Light Combat Aircraft (LCA), currently in development. Construction on the *Vikrant* began in 2005.

China is also reportedly planning to acquire at least one full-sized aircraft carrier within the next decade. Beijing has in recent years acquired several surplus carriers as scrap from Russia, in particular, the mega-carrier *Varyag*. A casualty of the post-Cold War, the *Varyag* was laid down in the early 1980s, but construction was halted in 1992 when the vessel was only 70 percent complete. The *Varyag* was supposed to be turned into a Macao casino, but in mid-2005 it was moved to a drydock at the Dalian shipyards, where it was painted Navy grey and its flight deck repaired.

At the same time, rumours have circulated that China may purchase the Su-33 fighter jet, which is flown off Russia's lone remaining carrier, the *Admiral Kusnetzov*. While it is doubtful that the *Varyag* – given its lack of engines, operating systems, wiring, and so on – will become China's first working aircraft carrier anytime soon, it could be used as a research and training platform for future Chinese carrier designs and crews.

Amphibious Assault Ships = Future Aircraft Carriers?

Just as interesting, at least three Asian-Pacific nations – Japan, South Korea, and Australia – are all acquiring large open-deck ships, although just operating helicopters. Japan's Maritime Self-Defence Force (MSDF) is currently acquiring four *Hyuga*-class "helicopter destroyers". The Republic of Korea Navy is in the process of accepting into service a new class of helicopter-carrying amphibious assault ships (LHD), the *Dokdo*, while the Royal Australian Navy (RAN) plans to acquire two new 28,000-tonne *Canberra*-class amphibious power-projection ships, based on a Spanish LHD design.

While none of these ships is intended as a fixed-wing aircraft carrier, they could serve as the basis for future such vessels. At 13,500 tonnes and with a "through-deck" design and below-deck hangars, the *Hyuga* in fact already resembles a small aircraft carrier, similar to the Royal Navy's *Invincible*-class. At present, the *Hyuga* is intended only to carry helicopters, and it currently lacks a ski-jump deck for fixed-wing aircraft. However, a ski-jump could conceivably be retrofitted to the design, and the MSDF could acquire short-take/vertical landing (STOVL) combat jets, such as the new F-35B Joint Strike Fighter (JSF).

For its part, the *Dokdo*'s size (larger in length and beam than many current *Harrier*-type aircraft carriers) and open flight deck make it conceivable that the design could be modified so as to permit the operation of fixed-wing fighters. Meanwhile, the original Spanish design for the *Canberra* actually included a ski-lift for fixed-wing aircraft, and in fact, earlier this year the RAN expressed its desire to purchase a third *Canberra*-class ship, to be outfitted with F-35B STOVL fighter jets.

Implications

Admittedly, it may be awhile before any regional navy can operate large carrier battle groups. The Indian Navy, ostensibly the furthest along in carrier development, has experienced considerable delays and cost overruns in both of its current carrier programmes. Moreover, there are few military systems more complex than an aircraft carrier. To be tactically effective, carriers typically have several different aircraft types aboard in a "carrier air wing". An American carrier air wing, for example, comprises fighter squadrons, an electronic warfare squadron, a squadron of anti-submarine and search-and-rescue helicopters, an early warning squadron, and a cargo aircraft detachment.

Furthermore, each of these aircraft types must be designed specifically for carrier operations – land-based aircraft cannot simply be used at sea. Additionally, operating fixed-wing aircraft off carriers is, from takeoff to landing, one of the most perilous operations imaginable. So we will probably not be seeing Japanese Imperial Navy-like carrier operations being undertaken by Asian-Pacific navies anytime soon.

Nevertheless, based on current trajectories, the overall expansion of sea-based aerial operations on the part of Asian-Pacific nations is significant enough to warrant attention. The proliferation of amphibious power-projection ships – particularly helicopter-based LHD-type ships – greatly increases these countries' capacities for expeditionary warfare and could thereby alter the process of littoral combat in the region. And even a handful of carrier-based fixed-wing aircraft – especially highly capable systems such as the F-35 or the Su-33 – could play a decisive role in battle and would also likely shift regional balances of power, particularly in such places as the Taiwan Strait and the South China Sea.

Overall, the Asian-Pacific navies are acquiring greater range, speed, operational manoeuvre, firepower, versatility, and flexibility, as well as improved battlefield knowledge and command and control. Consequently, conflict in the region, should it occur, would certainly be faster, more long-distance and yet more precise and more lethal, and perhaps more devastating in its effect.

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