

CSAG INFORMATION PAPER:

Induction of China's Third Aircraft Carrier into service

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1. Subject: Induction of China's Third Aircraft Carrier into service.

2. Purpose: This paper outlines the history, technology, and strategic implications of China's third aircraft carrier, **Fujian**, and its broader bearing on the South China Sea, China's naval ambitions, and ongoing great power competition.

3. Introduction: China's naval expansion has been a major strategic focal point as it seeks to solidify its status as a leading maritime power. With the commissioning of its third aircraft carrier, Fujian, in 2022, and now induction into service, China's Navy (PLAN) has taken a significant step in its ambition to evolve from a regional naval force to a blue-water navy.

4. History and Development of China's Aircraft Carrier Program: China's pursuit of an aircraft carrier capability began in the late 1990s, as the Chinese military leadership recognized the strategic importance of power projection and maritime dominance. In 1998, China acquired the unfinished Varyag, a Soviet-era aircraft carrier, which would later be commissioned as Liaoning in 2012. Liaoning was primarily a training and experimental platform, serving as a steppingstone for China to build its carrier operations expertise. The second carrier, Shandong, was commissioned in 2019 and was the first carrier entirely built in China. Shandong represented a significant leap in China's domestic shipbuilding capabilities, but it still relied on a ski-jump takeoff design, which limited its operational capacity in comparison to Western carriers.¹ The third carrier, Fujian, represents the most advanced stage of China's carrier program to date. Commissioned in 2022, Fujian is the first Chinese carrier to feature a flat-deck design and electromagnetic catapults for aircraft launch, an advanced technology fielded elsewhere only in the U.S. Navy.²

5. Equipment and Technology: At 320 meters in length and a displacement of over 80,000 tons, Fujian is China's largest and most capable aircraft carrier to date. The most notable feature of Fujian is its electromagnetic aircraft launch system (EMALS), like the U.S. Ford-class carriers, which is a significant advancement over the traditional steam catapults used by older carriers like Liaoning and Shandong.³ EMALS allows for smoother and more efficient launches of heavier aircraft, thus enhancing the carrier's operational range and capabilities. The flat-deck design of Fujian also allows for more flexible and



Figure 1 - Fujian Aircraft Carrier

efficient aircraft operations by increasing sortie generation, allowing heavier payloads to launch, supporting next-generation aircraft, and reduced maintenance. In terms of aviation complement, Fujian is expected to operate a variety of fixed-wing aircraft, including the J-15 fighter jets (based on Russia's Su-33), as well as J-35 stealth fighters.

6. China's Ambition to Become a Blue-Water Navy: The development of Fujian signals China's broader ambition to transition from a regional to a global blue-water navy. With its new aircraft carrier, China can now project airpower further beyond its shores, protect vital sea lanes, and deter potential adversaries in distant waters. In addition to its carriers, China is rapidly expanding its submarine fleet, particularly nuclear-powered ballistic missile submarines (SSBNs), which are a key element of its strategic deterrence. Together, these assets enable China to pursue its goal of becoming a fully functional blue-water navy by the 2050s. Admiral Liu Huaqing outlined a three-phased approach with specific target dates that serve as a benchmark for PLAN's modernization⁴:

- Stage 1 (Target: 2000):** Establish control over the waters within the First Island Chain (which includes the Yellow Sea, East China Sea, and South China Sea, including Taiwan).
- Stage 2 (Target: 2020):** Extend operational reach to the Second Island Chain (extending to the Western Pacific near the Bonin, Mariana, and Caroline islands, including Guam).
- Stage 3 (Target: 2040/2050):** Evolve into a genuine "blue water" or "global navy" capable of operating globally, a force that would include aircraft carriers.

7. Impact on the South China Sea: The commissioning of Fujian is a direct response to China's ongoing efforts to assert control over the South China Sea, a vital global shipping route and region of strategic military importance. The presence of a Chinese aircraft carrier in the region enhances China's ability to project power and maintain control over its claimed territories, including the disputed Spratly Islands and Paracel Islands. The Fujian will likely be central to China's Anti-Access/Area Denial (A2/AD) strategy, designed to deter foreign forces from operating in the region by using a combination of surface, subsurface, and air assets to create a formidable defensive perimeter.⁵ The aircraft carrier significantly enhances China's ability to establish air superiority over the South China Sea, a crucial element in its regional power projection.

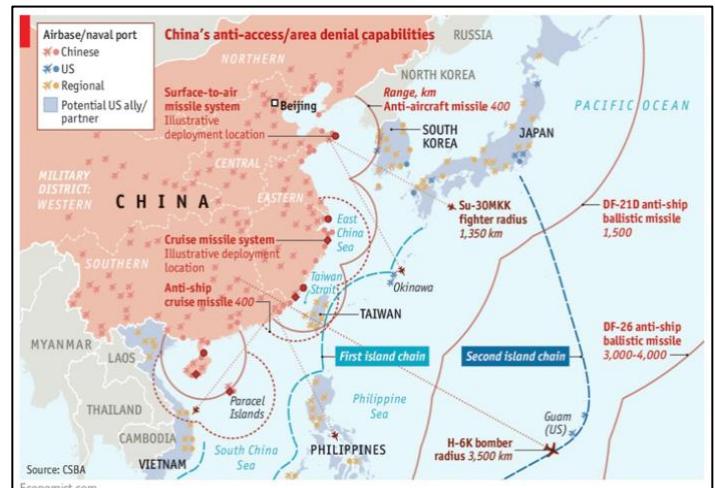


Figure 2 - China's A2/AD Strategy

8. Great Power Competition: The U.S. Navy has long been the world's preeminent naval force, particularly in the Pacific region, where its carriers provide unrivaled power projection capabilities. While the U.S. Navy still holds a significant technological edge in terms of nuclear-powered carriers, and networked operations, as well as considerable experience operating these capabilities globally, China's growing carrier fleet challenges U.S. dominance. The introduction of the Fujian aggravates tensions in the ongoing great power competition between the U.S. and China. China's expanding naval capabilities are part of its broader strategy to challenge U.S. influence in the Asia-Pacific region and beyond, particularly in areas like the Taiwan Strait, the East China Sea, and the South China Sea.⁶

9. Presence Without Dominance: China does not need to dominate the Middle East and challenge U.S. supremacy the way it plans to do in the Western Pacific / Indo-Pacific. It seeks limited but credible presence, which alone may dilute U.S. freedom of action. China's "Near Seas Defense and Far Seas Protection" naval strategy links directly to the Middle East by mandating the protection of strategic Sea Lines of Communication (SLOCs) in the "far seas," which puts massive Chinese reliance on the region for energy and its Belt and Road Initiative (BRI).⁷ Its key objectives in the Middle East include:

- a. Securing sea lanes and energy imports
- b. Protecting oversea assets and personnel
- c. Logistical support and power projection
- d. Counterterrorism
- e. Diplomatic influence and strategic positioning
- f. Intelligence gathering

10. While currently a secondary focus for China, their military activities are expanding to protect economic interests and enhance its regional influence. China is expanding its ties with regional partners through joint military exercises like "Blue Sword 2025" with KSA and counter-piracy/counterterrorism drills (the security belt series) with Iran and Russia. Middle Eastern nations are turning to China for military equipment that the U.S. is reluctant to provide due to export restrictions, high costs, or a commitment to maintaining Israel's Qualitative Military Edge (QME).⁸ This allows them to fill specific capability gaps for key defense needs. Countries like the UAE, Saudi Arabia, Iraq, and Jordan have acquired Chinese-made armed drones (such as the Wing Loong or CH-4). KSA's long-standing strategic missile program, including the acquisition of DF-3 and DF-21 ballistic missiles, has been developed with Chinese assistance. The UAE's interest in potential Chinese platforms like the L-15 trainer or J-20 stealth fighter, are seen as ways to diversify their air force. The real challenge is strategic not operational, where China's presence can help Beijing present itself as an alternative to the U.S. to reshape regional alignments without fighting a war, force the U.S. planners to consider China as a factor in crisis scenarios, and spread U.S. resources thinner.⁹

11. Future Advancements in China's Navy: China's naval modernization is far from complete, and the PLAN is expected to make significant advancements over the next few years. Some of the key areas of focus in China's naval expansion include development of more advanced aircraft carriers (Type-004), which would incorporate nuclear propulsion, stealth fighters, carrier-based drones, and improved catapults and launch systems. China's investment in its submarine fleet is one of the most important aspects of its naval modernization. By 2030, China aims to significantly improve the stealth, firepower, and survivability of its submarines. Some expected developments include Type 095 nuclear-powered attack submarines (SSNs), Type 096 SSBNs, equipped with JL-3 submarine-launched ballistic missiles (SLBMs), and advanced AIP (Air-independent propulsion) submarines.¹⁰



Figure 3 Type-004 - Construction started in 2024

12. Conclusion: The Chinese Navy is now the largest in the world with 335 ships in its fleet. However impressive this sounds, China's fleet still relies on mainly smaller classes of ships. Closer to home, the numbers move in Beijing's favor, but the lack of significant maritime force for power projection far away from its home waters is considered a significant disadvantage. To remedy this, China is growing its fleet of advanced aircraft carriers, submarines, and surface combatants, coupled with its A2/AD strategy to alter the naval balance and freedom of action in critical areas. In this regard, Fujian, marks a pivotal moment in its ongoing fleet modernization and its quest to become a dominant maritime power. China's naval expansion may pose a significant challenge to U.S. maritime dominance, particularly in the Indo-Pacific region, where the U.S. Navy has historically held the upper hand. The PLAN has evolved from no carriers (pre-2012) to building Ford-class style electromagnetic carriers in one decade, an unprecedented naval upgrade in modern history. By the mid-2030s, China will likely field 4-5 carriers including one or two nuclear powered ones, enabling routine presence from the Western Pacific to the Middle East.



Figure 4 Type-005 Zheng He to be inducted by 2035

¹ Reuben Johnson, "How China's Navy Scammed Its Way Into the Aircraft Carrier Club" <https://nationalsecurityjournal.org/how-chinas-navy-scammed-its-way-into-the-aircraft-carrier-club/> (accessed on November 7, 2025)

² Aaron-Matthew Lariosa, "China Commissions 3rd Aircraft Carrier Fujian" <https://news.usni.org/2025/11/07/china-comissions-3rd-aircraft-carrier-fujian> (accessed on November 7, 2025)

³ Naval News Navy 2025' "China Fujian vs. U.S. Ford: China's New Aircraft Carrier Challenges U.S. Navy's Most Advanced Warship" <https://www.armyrecognition.com/news/navy-news/2025/china-fujian-vs-u-s-ford-chinas-new-aircraft-carrier-challenges-u-s-navys-most-advanced-warship> (accessed on November 10, 2025)

⁴ "The Father of The Modern Chinese Navy-Liu HuaQing" <https://cimsec.org/father-modern-chinese-navy-liu-huaqing/> (accessed on 2 December, 2025)

⁵ "China seeks to project power far beyond its coast with the new Fujian aircraft carrier" <https://www.wral.com/news/ap/4fef2-china-seeks-to-project-power-far-beyond-its-coast-with-the-new-fujian-aircraft-carrier/> (accessed on November 7, 2025)

⁶ "Ibid"

⁷ "Hatice Beyza Sezgin", "China Boosts Naval Presence in the Middle East" <https://politicstoday.org/china-boosts-naval-presence-in-the-middle-east/> (accessed on December 2, 2025)

⁸ Aja Melville' "US, Israel, China and the Shifting Arms Trade in the Middle East"

<https://dsm.forecastinternational.com/2024/12/02/us-israel-china-and-the-shifting-arms-trade-in-the-middle-east/> (accessed on December 2, 2025)

⁹ Li Bin, "Chinese perspective on strategic stability engagement with the United States" <https://www.brookings.edu/articles/chinese-perspectives-on-strategic-stability-engagement-with-the-united-states/> (accessed on November 24, 2025)

¹⁰ Naval News Navy 2025' "China Fujian vs. U.S. Ford: China's New Aircraft Carrier Challenges U.S. Navy's Most Advanced Warship" <https://www.armyrecognition.com/news/navy-news/2025/china-fujian-vs-u-s-ford-chinas-new-aircraft-carrier-challenges-u-s-navys-most-advanced-warship> (accessed on November 10, 2025)