



CHINA'S SUBMARINE-LAUNCHED MISSILE TEST AND THE FUTURE OF INDO-PACIFIC DETERRENCE

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According to [Chinese media reports](#), at 12:01 pm on July 6, a People's Liberation Army Navy strategic nuclear-powered submarine successfully launched a submarine-launched strategic missile carrying a "training simulation warhead" toward "relevant high-seas areas in the Pacific." The missile reportedly "accurately fell into the designated sea area." Chinese Foreign Ministry spokesperson Mao Ning stated that the launch was part of China's "routine annual military training," was "consistent with international law and international practice," and was "not directed at any particular country or target."

[Subsequent analysis](#) suggested that the missile's final impact area was likely located in the South Pacific, in waters between Nauru and Tonga. Chinese authorities also released two [images](#): one showing the missile emerging from the sea surface, and another showing the missile ascending after launch. However, Beijing did not disclose the submarine type, missile model, launch location, flight distance, or exact impact coordinates. Notably, [a post](#) on the PLA's X account appeared deliberately ambiguous, placing images of both the JL-3 and JL-2 missiles side by side.

Based on available analysis, the launch was likely conducted by a Type 094 strategic nuclear submarine and involved a submarine-launched ballistic missile. The missile may have been either the JL-2 or JL-3, with a flight distance exceeding 7,000 kilometers. The [JL-](#)

[2](#) is China's second-generation intercontinental submarine-launched ballistic missile. The baseline version has an estimated maximum range of around 7,400 kilometers, while improved versions may reach 8,000 to 9,000 kilometers. It is believed to be capable of carrying 1-3 nuclear warheads. The [JL-3](#), which was [publicly displayed](#) for the first time during China's Sept. 3, 2025 military parade, reportedly has a range exceeding 10,000 kilometers. This would allow the PLA to strike the continental United States directly from nearby waters such as the South China Sea. The JL-3 is also believed to use multiple independently targetable reentry vehicle technology and may be capable of [carrying 6-10 warheads](#).

The PLA's previous intercontinental missile test toward the Pacific occurred on Sept. 25, 2024. That event marked China's first ICBM test into the Pacific in more than four decades, as earlier tests had generally been conducted toward desert areas in Xinjiang. At the time, outside observers assessed that the PLA likely launched a DF-31 land-based intercontinental ballistic missile from Hainan Island toward the Pacific south of Hawaii.

In the latest case, [some analysis](#) argues that the launch area may have been located in the Philippine Sea, suggesting that a PLA submarine had crossed beyond the first island chain. [Other assessments](#), however, suggest that the submarine may have departed from the Yulin naval base on Hainan Island and launched the missile from the South China Sea. [Still others](#) argue that the launch may have taken place in the Bohai Gulf, where China has previously conducted multiple submarine-launched ballistic missile tests. The test has triggered concern among several Indo-Pacific countries, including the [United States, Australia, New Zealand, and Japan](#).

Launch location, timing, and missile body

Although some reports suggest that the launch may have taken place beyond the first island chain, the PLA regards its nuclear submarines as major strategic assets of national power. It is therefore unlikely that Beijing would have risked sending such a submarine deep into the Philippine Sea for a high-profile test. A more plausible scenario is that the missile was launched from an area more firmly under Chinese control, such as the Bohai Gulf, waters off Guangdong, or the South China Sea, toward the South Pacific. Prior to the launch,

China likely positioned the Liaowang-1 and Yuanwang-series tracking ships across the Pacific to monitor the missile's trajectory and collect relevant flight data.

As for the missile body, to effectively track and analyze the relevant data, the JL-series missile's warhead was most likely a training simulation warhead carrying sensor equipment. From the perspective of the PLA's traditional pattern of "developing one generation, fielding one generation, and exporting one generation," this test was more likely to involve an improved version of the JL-2, namely the JL-2A. This would be similar to the DF-31AG launched in 2024. Although China already possesses the DF-41, testing often involves upgraded versions of weapons that are already in service. Therefore, an improved JL-2A, whose range may have been extended from roughly 8,000 kilometers to 9,000 or nearly 10,000 kilometers, is a plausible candidate.

The strategic signal to the United States

In the context of US-China strategic competition, nuclear weapons remain a fundamental element of great-power rivalry. This explains why China displayed several nuclear-capable systems during its September 2025 military parade, including the air-launched JL-1 (Jing Lei-1) nuclear-capable ballistic missile, the underwater-launched JL-3 (Ju Lang-3) submarine-launched ballistic missile, and the DF-5C liquid-fueled land-based strategic missile. By prominently showcasing nuclear weapons capable of striking the U.S. homeland, China further underscored the deterrent significance of the 2025 military parade vis-à-vis the United States. This type of land-sea-air nuclear triad capability formed the basis for the Soviet Union's ability to compete with the United States during the Cold War. China's successful test launch of a JL (Ju Lang) -series missile is therefore most significant because it signals to Washington that Beijing possesses a second-strike nuclear capability.

Although there is no indication that the United States and China are on the verge of war, the development and testing of nuclear capabilities can still serve the purpose of strategic nuclear deterrence. This test launch of a SLBM demonstrates that China has developed a credible second-strike nuclear capability. It also shows that the nuclear threat facing the United States is not limited to the PLA Rocket Force's land-based ICBMs. The PLA Navy's SLBMs have already become an important component of China's nuclear deterrence posture toward the United States. As a result, Washington will need to assess not simply what China can do, but how Beijing intends to use sea-based nuclear forces within its broader strategy of great-power deterrence. After all, nuclear weapons formed the foundation of deterrence strategy during the Cold War, and they remain central to great-power competition today.

For example, in October 2022, the China Aerospace Studies Institute under Air University published a [255-page report](#) on the PLA Rocket Force. The report provided detailed descriptions of Rocket Force units, bases, commanders and deputy commanders, and equipment. Many recent studies by US think tanks have likewise focused heavily on the Rocket Force. This explains why China's September 2024 [test launch](#) of the DF-31AG

intercontinental ballistic missile drew significant attention from Washington.

This latest successful submarine-launched missile test indicates that, from the US perspective, future research and monitoring can no longer focus only on the Rocket Force. The PLA Navy's second-strike nuclear capability must also become a major object of study.

Conclusion: Implications for Taiwan

Although China is unlikely to use nuclear weapons against Taiwan itself, the growth of China's nuclear capability may cause foreign countries to reconsider the degree and form of their involvement in a Taiwan Strait contingency. Therefore, while the PLA's successful submarine-launched missile test may not directly affect Taiwan in operational terms, it could create a delaying effect on future US support for Taiwan.

This is especially important if the JL-2 or JL-3 has sufficient range to threaten the United States from the South China Sea. For Washington, the question will be how to work more closely with Japan, Taiwan, and the Philippines to strengthen anti-submarine warfare efforts. Beyond ASW platforms themselves, this will also require greater exchange of hydrological data, acoustic signatures, and underwater surveillance information. Preventing Chinese nuclear submarines from breaking through the first island chain and entering the Pacific for missile tests may become an important area for Taiwan to strengthen cooperation with surrounding countries in the future.

The Pilot commentaries and responses represent the views of the respective authors. Alternative viewpoints are always welcomed and encouraged. Please write to rob@pacforum.org for more information on how to contribute.