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Taiwan's New Military Developments



Lung Teh Shipbuilding delivered ROCS *Fu Chiang* (PGG-620) to the Republic of China Navy (Source: Taiwan Military News Agency)

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Taiwan's new Chief of the General Staff, Mei Chia-shu Taipei Times

In a move that sent shockwaves through the Taiwanese military world but received little attention outside of Taiwan, Mei Chia-shu was announced as Taiwan's next Chief of the General Staff, replacing the retiring Chen Pao-yu. Mei was also promoted to Vice Admiral. In a corresponding move, Vice Chief of General Staff Tang Hua will assume Mei's former role as the Commander of the Navy.

Mei's promotion was an unexpected move, and it symbolized shifting strategies in Taiwan's strategy in defense. At 60, he is the youngest Chief of General Staff in Taiwan's history. In the past,

Mei would have likely been passed over for a more senior officer, such as the General Liu Jen-yuan of the Republic of China Air Force, who had been the anticipated successor. The Republic of China Navy also did not benefit from the big-ticket acquisitions as much as the Air Force's F-16V fighter jets and modern missiles or possess the same traditional institutional prestige as the Republic of China Army.

Mei is an unorthodox candidate, but likely also the best fit for the position. His Navy roots and past experience with the Military Equipment Bureau has placed him close to the domestic defense industry and the key research and development programs of the Republic of China Armed Forces. The Indigenous Defense Submarine (IDS) program will produce a class of diesel-electric submarines for Taiwan's navy, with the first submarine planned for launched this September. It is the latest domestic defense project, after the T-5 Brave Eagle advanced trainer jet. The IDS program is also seen as a highly-crucial one. Just as the T-5 Brave Eagle will replace the aging and accident-prone F-5F Tiger in the Republic of China Air Force, submarines produced under the IDS program would replace the Republic of China Navy's vintage submarine fleet. President Tsai Ing-wen has emphasized the importance of nurturing the domestic defense industry, and as such, Mei fits the bill as the optimal candidate for Chief of General Staff.

He also symbolizes the latest reform in the Republic of China Armed Forces. As China's People's Liberation Army rapidly modernizes, the Republic of China Armed Forces must contend with the reality that it no longer possesses an advantage in firepower and capability. It must now fight with brains, not brawn. In the past, the Republic of China Armed Forces has been criticized by Taiwanese and international observers for their rigidity and outdated doctrines. This is incompatible with the asymmetrical approach to defense that Taiwan must now adopt, which emphasizes speed and flexibility. Mei's promotion is the latest of the Tsai administration's attempt to reform the Taiwanese military into an elite and dynamic fighting force. As observed in Ukraine, asymmetric warfare is a viable strategy for a smaller military to defeat a much larger one. Under President Tsai, Taiwan has also extended mandatory military service for all able-bodied men from four months to one year, increased the recall period for reservists, and organized units similar to Ukraine's territorial defense force.

The Chief of General Staff is the highest leader of the military aside from the President. Incidentally, it is also a position overlooked by outsiders who focus more on the words and actions

of the President or Minister of National Defense. The ascension of Mei is one of many steps by an outgoing Tsai administration to structurally modernize the Republic of China Armed Forces. It will also further a sense of stability to the military in a potentially rocky period of Taiwan's politics as the current two-term administration gives way to a new one in next January's Presidential election. Regardless of which party wins the 2024 Presidential election, Tsai's influence on the military and endorsement of the domestic defense industry will live on.

Republic of China's *Fu Chiang* delivered to Taiwan's Navy



(Source: Taiwan Military News Agency)

On June 28th, Lung Teh Shipbuilding delivered ROCS *Fu Chiang* (PGG-620) to the Republic of China Navy. The ship is the third *Tuo Chiang*-class multi-purpose corvette commissioned after ROCS *Tuo Chiang* (PGG-618) and ROCS *Ta Chiang* (PGG-619). The next ship, *ROCS Hsu Chiang* (PGG-621), is expected to follow in late 2023. In total, 12 ships have been planned for the class.

In keeping with the rest of the class, the ship is named after a minor river in Taiwan. In this case, the Fuli River in Hualien County. The ship's dimensions and armament are identical to the ROCS *Ta Chiang* (PGG-619), the first production vessel of the *Tuo Chiang* class. It measures 65

meters long, 14.8 meters wide, and 6.2 meters tall and has a displacement of around 685 tons. 4 diesel engines power the ship, allowing it to reach a maximum speed of up to 30 knots when fully armed. Its fully-indigenous sensor suite comprises a CS/MPQ-90 Bee Eye X-band phased-array radar and a KT-2000 low-frequency navigation radar.

ROCS *Fu Chiang*, like other ships in the class, is armed with an Mk75 OTO Melara 76mm gun mounted in a stealth cupola. Its stealth superstructure houses four dual-launchers for the Hsiung Feng II anti-ship missile, four dual-launchers for the Hsiung Feng III anti-ship missile, and two Hai Chien II surface-to-air missile launchers, each housing eight missiles. Its fire control system is headed by the STIR 1.2 EO Mk2 designed by Thales.

In its mission to protect the integrity of Taiwan's territorial waters and maintain the freedom of navigation in the Taiwan Strait, the ROCS *Fu Chiang* is the latest piece to Taiwan's doctrine of asymmetrical warfighting and force-building against China, which has a much larger military than Taiwan. Interestingly, the ship shares the same name in Mandarin as the immortal titular character of the Japanese horror manga series *Tomie*.



Taiwan Retires Hawk Missiles (Source: Chuang Chia-Hung, Military News Agency)

In a ceremony held at Tainan Air Base closed to the public, the Republic of China Air Force formally retired the last MIM-23 Hawk missiles in service. This comes after news that the MIM-72 Chaparral surface-to-air missiles will be gradually phased out, with full retirement in the coming years.

The Hawk was first designed as a mobile field air defense platform that would be more mobile than the MIM-14 Nike Hercules. It was first deployed to Vietnam in 1965 during the Vietnam War but its first combat firing would take place in Israel two years later. In Taiwan, the system never saw combat.

The American-made missiles, which have been upgraded to the Hawk Phase III standard, have defended the airspace of Taiwan and its outlying islands since 1960, just one year after it entered service with the U.S. military. The last Hawk battery was relieved of duty earlier this year. The system's obsolescence became apparent as the years passed, and a shortage of spare parts posed a financial and logistical burden. The emergence of superior and more modern systems of U.S. and Taiwanese origin have also made the Hawk unnecessary in Taiwan's national defense.

Taiwan's short-range air defense is now undertaken by systems ranging from the shoulder-fired Stinger man-portable air defense system to the AN/TWQ-1 Avenger and ground-launched Tien Chien II. Its role in medium-range air defense has been replaced by the Tien Kung III and the MIM-104 Patriot missile systems.

Taiwan's Indigenous Defense Submarine Program Developments



(Photo Credit: Republic of China Navy)

The lead ship of Taiwan's Indigenous Defense Submarine Program is expected to be launched in September 2023. The program is expected to produce eight vessels and is designed by a coalition of engineers from the National Chung-Shan Institute of Science and Technology and Lockheed Martin. CSBC Corporation, Taiwan is tasked with manufacturing the ships. The program is one of the examples of President Tsai Ing-wen's directive to grow the domestic defense sector.

According to multiple military sources, the lead ship will be armed with at least 18 Mk48 heavy torpedoes instead of the standard combination of Mk48 torpedoes and Harpoon anti-ship missiles found on its *Chien-Lung*-class submarines. The military declined to comment on the specific number of missiles the ship will carry.

Ships produced under the IDS program would all feature an x-form rudder configuration, which would boost the submarine's maneuverability in the Taiwan Strait's narrow waterways. They would all measure 70 meters long, 8 meters wide, and 18 meters tall and have a displacement between 2,500 to 3,000 tons. Both sides of the ship are lined by passive sonar arrays in an arrangement similar to the Royal Navy's *Astute*-class. The lead ship will be powered through

air-independent propulsion, and decisions will be made at a later date regarding the propulsion method of subsequent vessels.

Currently, the Republic of China Navy operates two aging Dutch-built *Zwaardvis*-class submarines, named the *Chien Lung*-class in Taiwanese service. It also has two World War II-era submarines of American origin for training purposes: *ROCS Hai Bao* (SS-792) and *ROCS Hai Shih* (SS-791). The IDS program would allow Taiwan to modernize its submarine fleet and build up its naval asymmetric warfare capabilities. Previously, Taiwan had attempted to purchase submarines from Italy and France, but these plans were scrapped for a variety of political and economic reasons.

MS-110 Multispectral Imagery System begins mass production, Taiwan among customers



(Photo Credit: Collins Aerospace)

In June 2020, Taiwan ordered six MS-110 Multispectral Imagery System reconnaissance pods for its F-16 fleet. The system completed its first test flight last August and began production

on July 14th. The 2020 purchase totals NT \$963 million and all systems are due to be received by 2025, with technical and maintenance support from the US from 2026-2029.

MS-110 is an advanced variant of the widely-used DB-110 reconnaissance pod. It would allow the Republic of China Air Force to gather and share intelligence more effectively, innovating and maximizing the efficiency of force deployment. Currently, the Republic of China Air Force inventory includes the “Feng Yan” reconnaissance pod, which lacks night vision capabilities and faces logistical difficulties due to its age. MS-110 would allow targets to be viewed in true color, as opposed to the grayscale color scheme of other pods in Taiwanese service. It would also have thermal and infrared capabilities, allowing the operator to observe obscured targets in all weather conditions.

ルーヤンⅢ級ミサイル駆逐艦（艦番号「154」）



ジャンカイⅡ級フリゲート（艦番号「578」）



Two Chinese warships pass by northern Taiwan in run-up to Han Kuang exercises of Japan and Taiwan (Photo credit: Ministry of Defense, Japan)

Taiwan is scheduled to hold its annual Han Kuang live-fire exercise this year from July 24-28. Japan’s Ministry of Defense and Taiwan’s Ministry of National Defense detected two People’s Liberation Army Navy warships transiting the waters between the Japanese island of Yonaguni and

Taiwan's Yilan County. The two ships were identified as Type 052D destroyer *Xiamen* (154) and Type 054A frigate *Yangzhou* (578), both highly advanced and modern warships of the Chinese navy launched within the last 10 years. A ship-based Z-9 anti-submarine warfare helicopter was observed by the Taiwanese Ministry of National Defense as well.

The Japanese Ministry of Defense documented and published images of the two ships taken from a P-3C Orion of the Japan Maritime Self-Defense Force tasked to monitor the vessels along with Japanese surface vessels. Taiwanese aerial assets and land-based Hsiung Feng anti-ship missile units monitored the ships' passage as well.

The two ships transited the Miyako Strait on 7/18 to join other PLAN ships conducting military exercises off Taiwan's eastern coast, and on 7/19, they sailed north between Yonaguni and Taiwan.

