



The Pentagon appears to be preparing for a possible Chinese invasion of Taiwan by 2030. Chinese President Xi Jinping has set a deadline for the People's Liberation Army (PLA) and its branches—the Navy (PLAN) and the Air Force (PLAAF)—to be fully prepared for such an operation by the end of the decade. Given the rapid expansion of China's military assets, it is highly likely that the PLA will achieve this readiness on schedule. However, possessing advanced weapons and platforms is one thing; ensuring that personnel are adequately trained to operate them is another. Notably, the PLAN's last significant combat experience was 44 years ago during the Vietnam War, a conflict in which China suffered setbacks.

Currently, the military balance remains heavily in favour of the United States and its allies. Nevertheless, the Pentagon is taking no chances. If China attempts an invasion, it will primarily rely on aerial assaults and the deployment of troops across the 180-kilometer-wide Taiwan Strait, necessitating the use of a large fleet of naval vessels for both attacks and troop landings. To counter this, the U.S. military has developed the "Hellscape" and "Replicator" strategies aimed at neutralizing a large-scale Chinese assault.

The "Replicator" initiative involves the production of low-cost, autonomous sea-based drones—both surface and underwater—that will detect and attack Chinese warships and submarines. By deploying a swarm of these unmanned systems in the Taiwan Strait, ***the U.S. hopes to create a "Hellscape," effectively turning the waters into a heavily mined zone for Chinese vessels.*** The first wave of these Replicator drones is expected to be operational in the Taiwan Strait as early as August this year.

Additionally, the Pentagon envisions integrating aerial drones into the system to establish an area-denial zone for the Chinese military. These drones—airborne, surface, and underwater—will be interconnected into a single coordinated network. If China attempts an invasion, the Hellscape system will be activated immediately, buying crucial time for the U.S. Indo-Pacific Command to deploy reinforcements to Taiwan's defence.

While this strategy appears formidable, it raises several critical concerns. *First, it assumes that China will launch its invasion primarily by sea. However, the PLAAF could instead focus on aerial superiority, first neutralizing Taiwan's air defences before deploying airborne troops. In such a scenario, aerial drones may not be sufficient, and Taiwan would benefit more from a missile defence system similar to Israel's Iron Dome, David's Sling, Arrow, or THAAD, which have demonstrated effectiveness in countering missile attacks—most recently during Iran's assault on Israel.*

*Second, the Hellscape system relies on centralized control, making it potentially vulnerable to cyber attacks by Chinese hackers and cyber warfare units. If compromised, the entire system could fail.* While it is likely that the designers of Hellscape and Replicator have taken cyber security into account, the extent of its resilience remains uncertain.

*Another major challenge is China's overwhelming numerical advantage.* The PLA possesses a vast arsenal of warships, aircraft, and missiles that could simply overpower Taiwan's defences through sheer volume. So far, neither the Pentagon nor Taiwan has presented a definitive plan to counter this threat.

Regardless of the strategies and counterstrategies on both sides, one thing is clear: the United States will not allow Xi Jinping to take control of Taiwan without resistance. *At stake is not only U.S. geopolitical influence but also Taiwan's trillion-dollar microchip industry, a critical asset for global technology.*

