New Class of Unmanned Surface Vessels Has Risen Fast, Precise and Deadly

Counter USV and UUV Technology

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A shift in the maritime threat landscape is no longer emerging - it is fully here. The recent attacks on the Russian's Black Sea oil and gas facilities done by the Ukrainian Special Operations Forces illustrate this with undeniable clarity. The footage of the attacks spread far and wide across Youtube and Defense Channels was not remarkable for its shock value, it was instead remarkable because it had confirmed what maritime analysts were warning about. What the world witnessed through these videos was not an anomaly, it was a preview of what's to come.

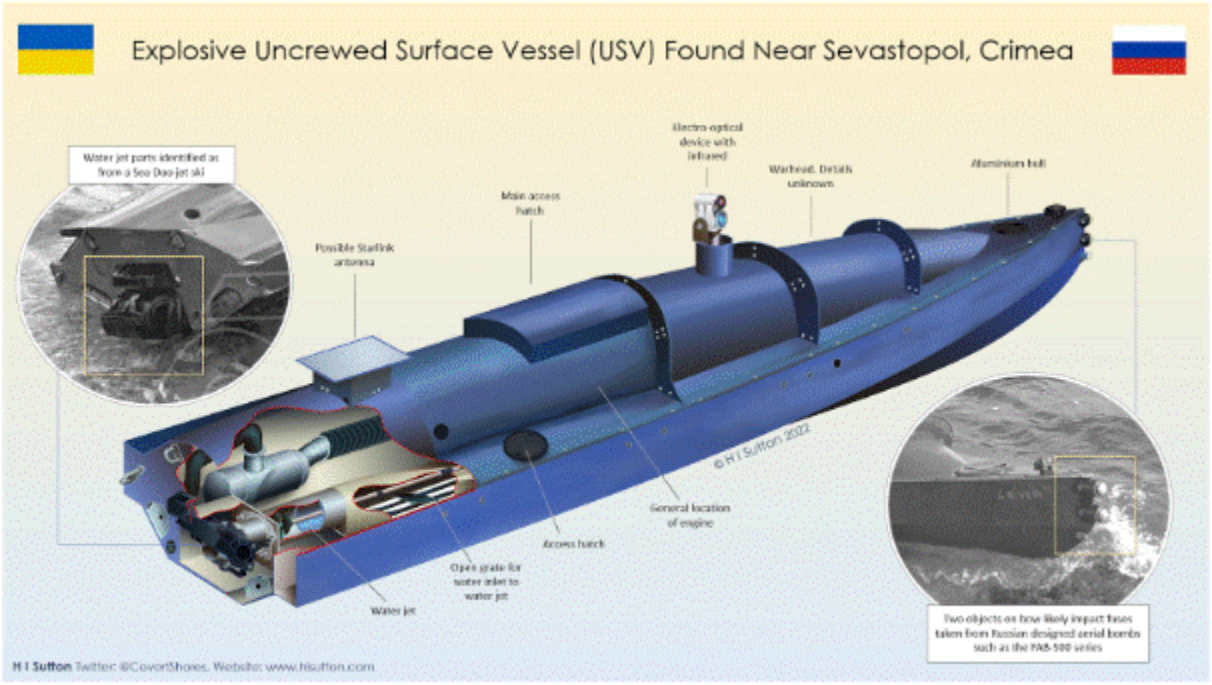

Figure 1. Low-profile USV demonstrating high-speed attack capability.

Unmanned Surface Vehicles (USVs), once dismissed as crude, improvised, remote-controlled explosive skiffs, have since evolved into a new class of fast, stable, low-profile attack craft fully capable of striking both stationary infrastructure as well as moving ships with extreme precision. These can no longer be considered as improvised weapons, recent advancements have demonstrated the capabilities of these hydrodynamically-refined, autonomously navigating, small-arms evading platforms engineered for targeted attack.

Yet while much of the public discussion across the Navy, Coast Guard, and Defense Media frames these new classes of drones as a threat to warships at sea, the reality is much more troubling: the most vulnerable targets are those that sit close to home.

America's maritime industrial base - private shipyards, fuel terminals, desalination plants, port infrastructure, power generation facilities, as well as commercial harbors that facilitate global trade - do not have the benefit of a naval combat system. These assets often rely on contract guards, aging CCTV networks, ad-hoc barriers, small patrol craft with overstretched crews, as well as a security model that was built for an era before unmanned surface threats had become commonplace. The attacks on Russian offshore assets had exposed a growing and dangerous mismatch between the rapidly advancing USV capabilities and the static defenses that are currently protecting U.S. maritime infrastructure across the world.

Figure 2. Oil Tanker attacked by Unmanned Threat.

Consider the defender's dilemma: a small, almost invisible craft that moves inches above the waterline, nearly invisible to radar and optical sensors. It closes the distance at high speeds while retaining high stability. Warning shots will likely miss, and ultimately prove useless; a patrol boat will likely fail to intercept; and lookouts may not even be able to see it until seconds before impact. Even the cameras that capture these events often do so only by chance, not by design. Simulations of USV attacks are no longer necessary - as the attack footage is already circulating.

These incidents have reinforced the hard truth: that a fast, unmanned surface threat cannot be defeated by slow, manned, legacy systems. Compressed reaction windows, low-observable signatures, and the asymmetric nature of these attacks all favor the aggressor. A USV is capable of charging forward without hesitation or fear; in contrast, a human defender must detect, identify, decide, and act - all within the span of a few seconds.

This reality should alarm port authorities, Facility Security Officers, infrastructure owners, Navy program managers and national security stakeholders who understand the critical role that maritime infrastructure plays in national security and commerce. The current

systems are not just outdated - they are dangerously inadequate in terms of matching these evolving threats.

For decades, private facilities have been expected to secure their waterfronts using predictable: security programs that are designed to *check regulatory boxes* rather than actually prevent high-threat scenarios, such as a 40-knot unmanned vessel attack. This is no longer a compliance issue - it is a strategic vulnerability with national economic and defense implications.
Maritime security can be modernized - and the tools necessary for this to happen already exist.

A credible, layered defense must combine persistent detection, automated classification, rapid response with a physical interdiction layer. Systems such as Bishop Ascendant Inc.'s POSEIDON Maritime Defense System provides exactly this: a technology-driven architecture that has been specifically designed in order to defeat low-signature threats, expand situational awareness, as well as significantly increase the reaction time of the defenders - capabilities that legacy systems and patrol boats are incapable of providing alone.

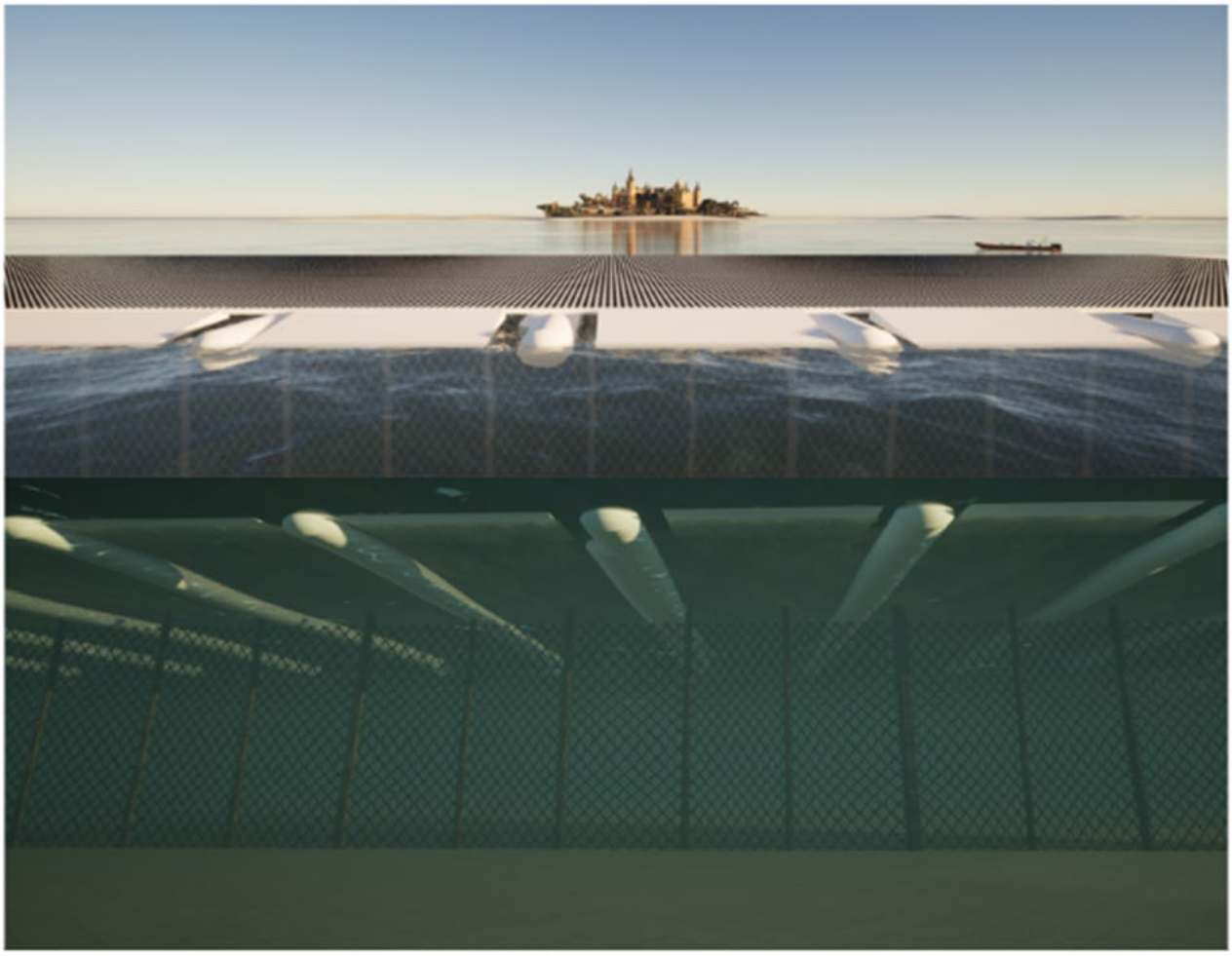

Figure 3. POSEIDON barrier system designed for physical interdiction.

Integrated into a multi-layered security framework, with a physical barrier as the final line of defense, systems like the POSEIDON can offer the adaptability and resilience necessary in order to counter the rising threat of autonomous maritime attacks.

The future of maritime security will not belong to those organizations that cling to the idea of bolting modern tools onto outdated concepts. It will truly belong to those that understand the operational realities of today's ports and shipyards - and who ultimately recognize the demands of this new era that is defined by unmanned systems, advanced sensors, and AI-driven maritime awareness. In that future, advanced systems like POSEIDON will not be "upgrades". They will prove to be essential elements of a credible defense posture for decades to come. visit: **www.bishopascendant.com**