Evaluating Command and Control Systems for Taiwan Strait Defense: Adapting Maven, Lattice, and Indigenous Capabilities

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The Taiwan Strait presents a unique defense challenge: a 110-mile maritime barrier where any amphibious invasion would be channeled into predictable landing zones during limited seasonal windows. Recent wargaming simulations suggest that integrated command and control (C2) systems capable of coordinating anti-ship assets could devastate an invasion fleet before it reaches shore. However, the specific capabilities required for effective C2 in this maritime environment remain unclear. This research investigates what feature sets and capabilities define a winning C2 system for Taiwan Strait defense and evaluates how existing systems meet these requirements. This research draws on Ukraine's Delta situational awareness system as an operational battlefield implementation of C2 software which provides AI-enabled data analytics from many heterogeneous data sources and allows coordination across all domains of battle. However, unlike Ukraine's land-based operations, operations in and around Taiwan require long-range maritime coordination (1000+ kilometers), integration of unique assets including uncrewed surface vessels and submarines, greater drone autonomy to combat advanced Chinese electronic warfare, and interoperability between Taiwanese and allied systems. The methodology proceeds in three phases: analyzing literature on Ukrainian drone operations, Chinese counter-drone capabilities, and Taiwan Strait wargaming to establish operational requirements; evaluating how Palantir's Maven, Anduril's Lattice, and Taiwan's existing systems (System 10-1E and Link 16) align with these requirements; and developing actionable recommendations for capability gaps and integration priorities. Expected findings include identification of specific shortfalls in current systems for maritime swarm coordination and long-range communication, assessment of interoperability challenges between Taiwanese and U.S. platforms, and concrete recommendations for software architecture modifications. This research provides a technical and strategic blueprint for AI-enabled C2 systems that could significantly enhance Taiwan's defensive capabilities in a potential cross-strait conflict.