The Commandant's Rapid Response Essay Contest: Honorable Mention

Corps Competencies

The future MEU

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On 14 April 2022, Ukrainian forces sank the flagship of the Russian Black Sea Fleet using two Neptune anti-ship cruise missiles.[1] Then, on 31 December 2024, a Ukrainian naval drone achieved another milestone: it destroyed a Russian Mi-8 helicopter using missiles launched from an unmanned surface vessel.[2] Thousands of miles away in the Red Sea, Houthi forces continue to demonstrate that "autonomous systems are scalable, attritable equalizers of naval power," forcing the U.S. Navy to expend million-dollar missiles against thousand-dollar drones.[3] Neither the Ukrainians nor the Houthis have anything approximating a warship. These developments, however, herald a transformation in how maritime power will be projected and contested in the coming decades by combined-arms forces.

The Marine Corps' *Force Design 2030* identified the need for transformation to meet peer competitor threats, particularly China's anti-access/area-denial capabilities in the Indo-Pacific. The current trajectory toward large, static, defensive Marine Littoral Regiments (MLR) and insistence on MEU deployments exclusively on Navy ships represents an inadequate response to 21st-century challenges. Instead of abandoning proven organizational structures, the MEU of the future must become the organically mobile combined-arms multi-role unit of action of the Marine Corps, tied into the Joint Force, performing everything from Special Purpose MAGTF through MLR missions.

The MEU of 2035 must meet three requirements: organic mobility independent of Navy shipping constraints in the tactical operating area; integration of cutting-edge technology, especially unmanned systems managed through AI-enabled interfaces rather than proliferating specialties; and seamless connectivity to joint command and control (C2) down to the lowest tactical level. This evolution represents not a rejection of *Force Design 2030's* strategic insights, but a superior method for achieving its operational objectives through the Marine Corps' most flexible and proven organizational construct.

The *Force Design 2030* Gap

Force Design 2030's strategic assessment correctly identified the imperative for transformation. The Marine Corps needed to design "a force for naval expeditionary warfare in actively contested spaces" capable of facilitating "sea denial and assured access in support of the fleet and joint operations."[4] The resulting emphasis on Littoral Operations in a Contested Environment and expeditionary advanced base operations reflects sound strategic thinking for countering peer competitors.

The operational solution, however—MLRs—suffers from fundamental contradictions that undermine *Force Design's* core objectives. The MLR concept envisions Marines operating "from small bases under the concept of expeditionary advanced base operations (EABO) in low signature maneuvers through stand-in forces (SIF)."[5] Yet, the MLR itself represents anything but a small, low-signature formation. Each regiment requires 1,800–2,000 Marines and sailors in a relatively fixed location, creating exactly the kind of large target signature that competitor targeting regimes are designed to exploit.

Moreover, the MLR depends on Navy shipping for mobility and sustainment. *Force Design 2030* requires "as many as thirty-five new Navy amphibious ships to transport the new Marine units" to their operational positions.[6] Whether or not the Landing Ship, Medium becomes an eventual reality, given the problems in the program, scarcity decreases its value to Marines while increasing its value to the adversary as a target.[7] Dependency creates vulnerability. The result is a formation in defensive positions but too large to hide and too dependent on vulnerable platforms to achieve the distributed, persistent presence that *Force Design* envisions.

The command structure of MLRs compounds these problems. Unlike MEUs, which integrate air, ground, and logistics elements under a single commander at the tactical level, MLRs require coordination with higher headquarters for basic operational functions like aviation and littoral mobility. This creates the large command element that current conflicts demonstrate to be counterproductive in forward positions. Ukraine's success stems partly from pushing decision-making

authority down to small, agile units that can adapt rapidly without requiring extensive coordination.[8] The MLR construct moves in the opposite direction, centralizing functions that should be distributed and creating immobile command posts that present lucrative targets for adversary targeting.

Critics have also noted that *Force Design 2030's* "distributed operations proposed by the Marines are not logistically supportable" using current concepts and available present resources.[9] The MLR model exacerbates this challenge by creating large formations that require substantial sustainment while offering limited flexibility for disaggregation, even with a littoral logistics battalion.[10] A MEU-based, scale-able MAGTF approach, by contrast, builds sustainability into the basic unit structure through organic scale-able logistics and the essential task to operate independently for extended periods.

Transiting maritime choke points can expose platforms and formations to modern asymmetric threats. The USS* Bataan *(LHD 5) and USS* Oak Hill *(LSD 51) as seen from USS* New York *(LPD 21), with the embarked 26th MEU in the Red Sea. ***(Photo by Mass Communication Specialist 2nd Class Lyle Wilkie.)***

Contemporary Conflicts

Recent conflicts provide compelling evidence for the superiority of small, mobile, technology-enabled formations over large, static units. Ukraine's approach to naval warfare demonstrates what becomes possible when innovative thinking meets technological opportunity. Ukraine is "now rebuilding its navy around a fleet of unmanned surface vehicles (USVs), making sea drones central to its maritime strategy." More significantly, "these USVs have evolved beyond their early use as kamikaze sea boats; they have now evolved into mobile drone-launch platforms."[11]

Ukrainian evolution illustrates a possible principle for the future MEU: platforms must serve multiple functions and adapt rapidly to changing tactical requirements. Ukrainian naval drones now launch aerial drones, conduct reconnaissance, deliver supplies, and execute strikes—all from the same basic platform. The flexibility stems not from having specialized systems for every mission, but from having adaptable platforms and people who can integrate new capabilities as they become available.

The Red Sea crisis reinforces these lessons while highlighting the cost-effectiveness of unmanned systems. Houthi forces have even produced "underwater weapons [that] are inherently harder to detect and counter than surface vessels" while imposing risks on conventional naval forces.[12] The fundamental asymmetry of deploying massive combat systems and complex missiles to address rudimentary drones has been noted by adversaries.[13]

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Ukrainian forces achieve effects because "over 90 percent of AI military technologies coming from domestic developers" are integrated at the tactical level, allowing basic infantry units to coordinate complex operations.[14] This model points toward the future MEU: a formation where individual Marines can flexibly supervise advanced intelligence, surveillance, and reconnaissance (ISR) and weapons systems when connected through AI-enabled interfaces, not through proliferation of specialties—it is an infantry function. Contemporary conflicts demonstrate that "the simple reality is that autonomous systems are scalable, attritable equalizers of naval power."[15] This reality demands formations that can both employ and counter unmanned systems across all physical domains. An enhanced, distributed MEU can integrate unmanned systems as force multipliers.

The speed of innovation in current conflicts also argues against the MLR model's emphasis on specialization. Combat developments occur so rapidly that "the soldier in the trenches on the ground is part of the innovation process," rather than waiting for formal research and development cycles.[16] The MEU's combined-arms structure naturally supports this type of rapid adaptation, while the MLR's specialized components are sub-optimal for cross-functional innovation because they do not represent the full complement of Marine capabilities and are not in a scale-able MAGTF form that forces those capabilities to regularly operate together.

The MEU of tomorrow and 2035 must resume its place as the basic Marine unit of action, addressing three requirements that *Force Design 2030* correctly identified but the MLR inadequately satisfies: organic tactical mobility, technological integration, and joint interoperability. Each requirement demands specific organizational and technological solutions that build upon the MEU's existing strengths while incorporating lessons from recent conflicts—and it must do so flexibly in whatever scale or form applicable to the moment, not avoiding missions that might be seen as Special Purpose MAGTFs or MLRs, but embracing the full range of capability.

Organic Tactical Mobility

The most critical limitation of the current Marine Corps force projection is the real and perceived dependency on Navy amphibious shipping. This dependency creates strategic vulnerabilities, operational constraints, and tactical predictability/immobility that adversaries can exploit. The MEU of 2035 must achieve total organic mobility through a combination of organic aviation assets, commercial shipping/aviation integration, and Service littoral capabilities, with tactical mobility through aviation and light maritime craft such as those under experimentation with reconnaissance.

Recent MEU deployments demonstrate the potential for extended operations with minimal shipping dependency, while also displaying Marine global crisis response capabilities. The 15th MEU's recent Indo-Pacific deployment "transited over 3,200 nautical miles in support of deterring aggression, crisis response, presence operations" while maintaining operational flexibility throughout.[17] This capability remains constrained, however, by reliance on traditional amphibious platforms with poor reliability and readiness.

The solution lies in distributed strategic mobility rather than concentrated shipping. For strategic mobility, the formation should be capable of utilizing commercial shipping, chartered aircraft, and host-nation transportation assets rather than depending solely on gray-hull Navy platforms. Furthermore, Marines should continue to take advantage of the capabilities of Military Sealift Command, Army, Air Force, and even the Coast Guard, under the coordinated auspices of the deploying MEU.[18]

Tactically, the future MEU should possess organic aviation capabilities sufficient for tactical mobility, including expanded rotary-wing and tiltrotor assets for personnel movement and logistics. The Marine Corps should also develop indigenous littoral capabilities modeled on Ukrainian and Houthi innovations. These forces have demonstrated high littoral impact without a warship; the Marine Corps can do the same. Just as Ukraine rebuilt its navy around unmanned surface vehicles, the future MEU should include organic unmanned systems for reconnaissance, logistics, and strike missions in littoral environments. These systems should be simple enough for rapid production, deployment, and replacement while sophisticated enough to operate in contested electromagnetic environments and should emphasize multi-mission capabilities rather than specialized platforms, enabling tactical commanders to adapt to changing requirements.

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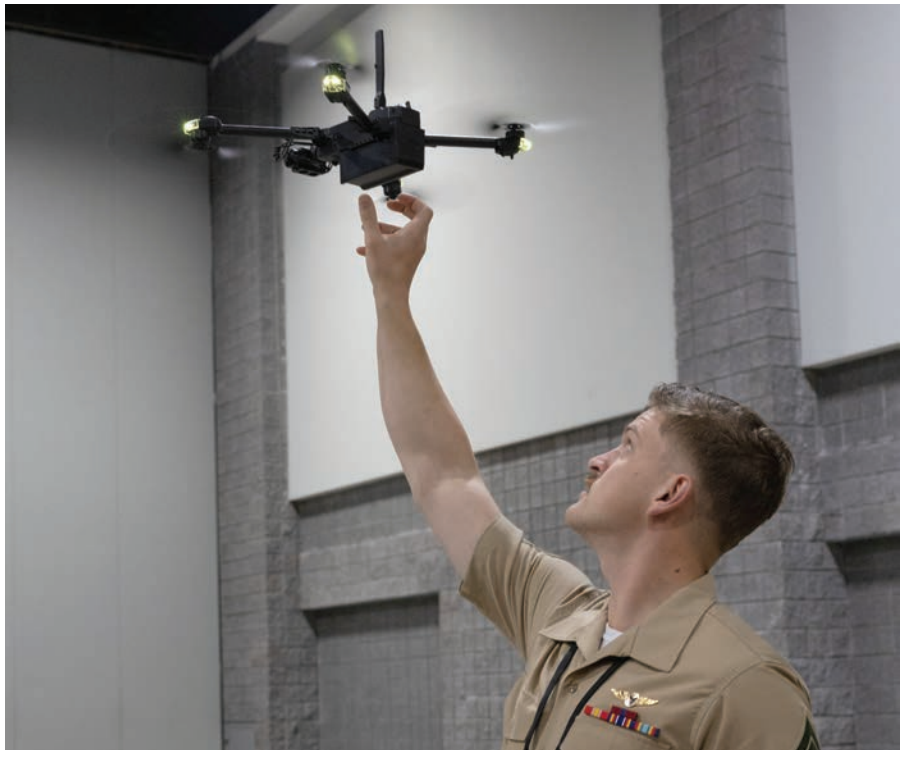
This approach transforms the MEU from a formation that requires shipping to a formation that can utilize shipping when available but operate independently when necessary. Rather than concentrating Marines in predictable



A Marine small unmanned aircraft system instructor assigned to School of Infantry East recovers a Skydio X2D drone during Modern Day Marine 2025. *(Photo by LCpl Ellen Guo.)*

locations defined by shipping availability, the future MEU can achieve persistent presence through distributed deployment patterns that complicate adversary planning.

Technology over Specialties

Current military thinking often responds to new capabilities by creating new specialties and organizational structures. This approach leads to increasingly complex formations with proliferating single-purpose elements that require extensive coordination. The future MEU must take the opposite approach: using technology to enable broader competencies among fewer personnel to take advantage of the ability of newer generations of Marines to rapidly assimilate technology as they have been doing throughout their lives.

Ukraine's success demonstrates the potential for AI-enabled systems to extend individual capability rather than replace human decision making. Ukrainian forces use "machine vision in drones and ground platforms, allowing for autonomous targeting" while maintaining human control over critical decisions.[19] This model enables small units to coordinate complex operations without requiring extensive specialized support.

The future MEU should integrate AI-enabled C2 systems that enhance basic infantrymen to supervise advanced ISR and weapons systems. Rather than requiring specialized operators for every system, the formation should use intuitive interfaces that enable cross-training and redundancy. A rifleman should be capable of operating reconnaissance drones, coordinating fires, and managing logistics networks through standardized interfaces that translate complex technical operations into tactical decisions—just as in the games they grew up playing. The approach contradicts the MLR model's emphasis on specialized batteries and support elements. Rather than creating separate units for different functions, the future MEU should distribute capabilities throughout the formation while using technology to enable coordination and mutual support. The result is a formation that maintains capabilities even when individual elements are degraded or destroyed.

The technological integration should focus on three areas: autonomous systems for routine operations, AI-enhanced decision support for complex problems, and resilient communications for distributed coordination. Autonomous systems should handle logistics, reconnaissance, and basic security functions, freeing Marines for tasks requiring human judgment. Artificial intelligence should provide decision support that enhances rather than replaces human analysis. Communications should be resilient enough to maintain at least local coordination even in contested electromagnetic environments.

Joint National-to-Tactical Integration

The MEU's greatest advantage is its proven ability to integrate air, ground, and logistics capabilities under unified command—the MAGTF—as though it were a small Joint Task Force, which it should plan to be. The MEU is "unique in that its air and ground combat elements are combined with a logistics combat element under one commander," enabling rapid decision making and coordination.[20] The future MEU must extend this integration to joint and coalition operations while maintaining tactical agility.

Current joint integration often occurs at higher echelons, creating delays and coordination challenges that impede tactical action. The future MEU must be capable of direct integration with joint assets, coalition partners, and interagency elements at the tactical level through global precision strike and insertion into Combined Joint All Domain C2. This requires both technological capabilities to enable small organizational structures rather than large C2 nodes that duplicate higher echelon capabilities while attracting targeting. Marines forward must focus on and bias for action rather than coordination, leaving higher echelons to do their jobs.

Marines do not need to attempt to replicate all specialties to the lowest level and combine them into a large command post because a MEU element will only have authority over its own and attached forces and can use that authority to find, fix, and finish targets. Everything else has to be requested anyway. Nearly all space, information warfare, cyber, and strategic/operational ISR activities fall under the authorities of at minimum the combatant commander. The MLR concept of somehow being akin to a joint forward air controller does not make sense when the ISR to identify, and the firing unit to service the target fall under the warfighting combatant commander or Joint Task Force. What the MEU needs is integration into the joint system, not control of it. If more capabilities are required locally, for example from the Army's Multi-Domain Task Force, those capabilities can be brought in and employed by the MAGTF as they have been so often historically.

Counterarguments

It could be asserted that MLRs better serve *Force Design 2030's* objectives by providing specialized capabilities optimized for specific missions. This argument merits consideration, particularly given the significant resources already invested in MLR development. The MLR concept offers advantages in anti-ship missile and air defense capabilities, though limited in range and magazine depth. The MLRs also offer integration with Joint Forces through targeting, though with C2 systems no more sophisticated than those of MEUs.

The advantages, however, are outweighed by vulnerabilities that contemporary conflicts expose. The MLR's size and complexity create a high-value target that even rudimentary strike systems are designed to engage. More significantly, the MLR's specialization reduces its scale-ability to changing mission requirements and operational environments—crisis response—limiting the utility of the unit for that ever-growing mission. Also, external dependency is a compelling strike against the MLR model. Current MLR concepts require extensive inorganic support for mobility, communications, and sustainment. This dependency creates weaknesses that adversaries in current conflicts exploit, potentially rendering entire for-

mations ineffective through targeted attacks on support systems. Some of these limitations, along with mobility problems, have already been noted to Congress.[21]

The future MEU can address these vulnerabilities while potentially expanding on the MLR capability. With an aviation combat element, the F-35C can carry the Joint Strike Missile and the Long-Range Anti-Ship Missile, both with unclassified ranges of 200+ nautical miles.[22] The Army just recently conducted a live-fire test of the precision strike missile from a High Mobility Artillery Rocket System in Australia with an unclassified range of 300 miles that can hit moving targets on land or sea. Future increments are expected to increase the range to 600 miles.[23] The MEU can arrive with both aviation and surface-to-surface systems distributed across an empowered MAGTF that can move around its zone of action. The future MEU concept should build upon existing structures and capabilities and borrow good ideas being applied to systems the Corps already has, reducing development costs while accelerating implementation timelines. Developing entirely new organizational structures and specialized equipment like the MLR requires substantial investment.

The lessons from Ukraine and the Red Sea are clear: future conflicts will be won by formations that combine human judgment with technological capability, achieve effects through distributed operations that concentrate firepower (not personnel), and adapt rapidly to changing operational requirements. The MEU's organizational structure naturally supports these requirements.

Strategic Implications

The future MEU must serve dual strategic purposes: mobile forward presence (not a fixed SIF) capable of deterring and defeating peer competitors while maintaining the global crisis response capabilities. These are purposes that define Marine Corps operations, revised for the era of renewed great-power competition. These requirements create tensions that the MLR model cannot adequately resolve but that an enhanced MEU can.

Global crisis response is the proven ground for the MEU, requiring formations capable of rapid deployment, independent operations, and seamless integration with joint and coalition partners. Crises continue not to abate but increase. Great-power competition demands formations capable of operating in contested environments against sophisticated adversaries. The future MEU meets this requirement through distributed operations, advanced technology, and organic mobility that reduces dependency on vulnerable support systems even in persistent presence in contested areas.

The Marine Corps must formalize the MEU's role as the basic unit of action for distributed operations, encompassing all missions from the now-defunct Special Purpose MAGTF up through MLR, with an objective of being a Joint Task Force by 2035. The MEU deployment and rotation schedule should be normalized regardless of the fitness of naval vessels; deployments must proceed by any means available to show a force that is both mobile-SIF and crisis response, and most importantly, forward and available.

Conclusion: The 21st Century Force-in-Readiness

The dual mission—strategic deterrence and crisis response—exemplifies what the future MEU must accomplish on a global scale. The Marine Corps stands at a crossroads between proven organizational structures and emerging operational requirements. *Force Design 2030* correctly identified the need for transformation, but the MLR solution creates vulnerabilities while abandoning existing strengths. The future MEU offers a superior alternative that achieves *Force Design* objectives while maintaining the global crisis response capabilities that define Marine Corps value to the Nation. In an era of rapid change and persistent competition, focusing on and evolving the MEU offers the best path to relevance and effectiveness.

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