

## Chapter 3

### **Enhanced MAGTF Operations**

#### **Introduction**

*Evolving the MAGTF for the 21<sup>st</sup> Century* provided a framework for refining our primary operational approach for conducting the range of military operations: the Marine air-ground task force (MAGTF). Long and varied operational experience has proven that the MAGTF—designed to be deployed, employed, and sustained from the sea without reliance on host nation ports, airfields, or permissions—is a fundamentally sound construct. Combat operations over the past decade have underscored two significant points. First, our adversary will continue to adapt, and second, we must continually assess and adapt our warfighting capabilities in order to ensure mission success. *Enhanced MAGTF Operations* acknowledges this requirement to continue to adapt and looks into ways our MAGTF capabilities can be enhanced to best support the requirements of the future security environment.

#### **Description of the Military Problem**

The MAGTF remains a fundamentally sound construct for task-organizing and employing Marine Corps forces across the range of military operations. However, the historical insights, recent operational experience, and projections of future challenges the MAGTFs must possess sufficient ability to:

- Remain deployable and employable given today's lift challenges.
- Perform multiple, diverse, and often simultaneous (combat, engagement, security, relief & reconstruction) activities across the range of military operations.
- Provide the capabilities necessary to engage forward to build partners and relationships; respond to protect National interests

and assure allies; project power to overcome access challenges, and counter irregular threats enabling wide area security.

## Central Idea

Mission command provides the basis for enhancing the capabilities of the MAGTF. As described in the previous chapter, the purpose of mission command is to empower decision-making to the tactical edge, and is based on the mutual trust between senior and subordinate commanders. It calls for increased trust and fosters increased competence across the force.

Mission command is the foundation for developing *Enhanced MAGTF Operations* (EMO). The purpose of this initiative is to advance the ability to:

- Operate in a distributed environment where information and communications may be limited or non-existent and thus require informed decision-makers at the lowest echelons of command.
- Perform multiple, diverse, and often simultaneous tasks across the range of military operations.
- Employ, support, and sustain subordinate maneuver units at extended distances, or in compartmentalized terrain which creates physical separation from higher and adjacent units.
- Interact effectively with local populations to understand a given situation and ensure tactical actions support strategic goals.
- Conduct operations at sea, from the sea, and ashore.
- Overcome challenges to access and mobility, and when necessary employ decentralized operations to assure access through multiple entry points.
- Selectively mass or disperse forces and fires at desired times and places, as the situation requires.

## What are Enhanced MAGTF Operations?

EMO does not offer any revolutionary ideas in thought; it is evolutionary in design. It seeks to develop the human dimension, improve upon the intricacies of command, and the integration of technology. The concept pushes all elements of the MAGTF to become lighter, more adaptable, more resourceful and faster in relation to the enemy. It embraces maneuver warfare doctrine and extends our capabilities and capacities. In particular EMO recognizes the need for decentralized action to solve complex problems, and adapt to ambiguous situations—at a tempo that outpaces that of our adversaries. Through EMO we have the ability to extend the battlespace and likewise to improve our capability to concentrate when required generating increased levels of responsiveness, precision and versatility.

Enhanced MAGTF Operations provides a means to improve capabilities in leadership, training, leader development, doctrine and technology across the MAGTF to prepare the Corps to adapt **ahead of any enemy**—anywhere in the world—under any conditions. It is a base-line concept to drive advancements that leverage technology to empower the ingenuity of our small-unit leaders; advancements that take advantage of mission tactics between well-developed leaders. This emphasizes decentralized command and control and takes advantage of well cultivated command climates while consciously avoiding overdependence on technological solutions to complex problems. As such, it is our belief that the tenants of MCDP-1 continue to be the most valuable resource in understanding our nature and view of warfare.

The conceptual ideas driving EMO should be viewed as a long term goals, with an acknowledgement that recent operations have marked a change in the nature of war from technology-centric to human-centric. The enemy has positioned himself to avoid our technological overmatch and reinforce his ability to wage war in the human dimension. The MAGTF must evolve to address and take advantage of this reality. We must revisit and then expand upon the lessons learned throughout the history of the small wars. The leadership, aggressiveness and

adaptability that that have served our Corps throughout history must expand and evolve to prevail in this current and future environment.

This concept is intended to provide fundamentals and direction to guide enhancements. We will continue to discover the specific improvements through experiments and feed back from the MAGTF and vet those concepts throughout the force. Then we will test the training, organization and equipment in the most demanding missions across the range of military operations.

## **Fundamentals of EMO**

- ***Learning Organization-*** Learning Organization defined: an organization that acquires knowledge and innovates fast enough to survive and thrive in a rapidly changing environment. Learning organizations (1) create a culture that encourages and supports continuous learning, critical thinking, and risk taking with new ideas, (2) allow mistakes, and value employee contributions, (3) learn from experience and experiment, and (4) disseminate new knowledge throughout the organization for incorporation into day-to-day activities.
- ***Risk Acceptance-*** Embracing a prudent amount of risk allows a commander to take advantage of enemy gaps, to place his unit in an advantageous position on both human and physical terrain. Taking a risk offers the possibilities of both great victory and great defeat; it does not require the abandonment of all security – it is simply calculating an action or series of actions against the possibility for tactical, operational or strategic outcomes and embracing the chance of loss and failure, in an effort to achieve advantage over the enemy.
- ***Context-*** The understanding of the Information Operations (IO) plan, intelligence collection and dissemination, the human terrain, the strategic and operational goals, and the constraints and restraints placed upon the force flows up and down the chain of command. Throughout a campaign the MAGTF must understand the environment they work in; one which may evolve

### Marine Corps Operating Concepts - Third Edition

over time. The enhanced MAGTF must have the tools and training that allow them to rapidly share necessary information throughout operations.

- **Tempo-** The MAGTF must control the tempo of operations understanding the need for tactical patience and when to increase the rate of decision and action to force the enemy to react to us – out maneuvering him across physical, human and cyber terrain. The empowerment of junior leaders inherently enables and reinforces rapid decision making—collectively due to the multitudes of individual decisions being made concurrently at the tactical level at any given time; and individually due to the willingness of junior leaders to make a decision they know is theirs to make. This idea, reinforced through application creates an operational tempo most adversaries will be unable to match.
- **Elasticity-** The MAGTF requires a capability to change its size, shape, or distribution distribute as far as required by METT-T and aggregate to take advantage of mass when the opportunity or necessity arises—expanding the range of tactical options. We must be able to operate from dispersed to concentrated throughout the battlefield regardless of terrain, distance and complexity, in operations that span the ROMO. This demands an increased ability to work in some of the most austere and complex of environments; this requires increased capability for mobility, communication and sustainment. This also places new demands and increased responsibility on small unit leaders. Elasticity requires empowerment at the lowest level—empowerment earned by trust and demonstrated self-sufficiency.

## **MAGTF Refinements**

### ***Lighten the MAGTF***

First, we need to significantly lighten the MAGTF, which will require a considerable paradigm shift across the Marine Corps and will have a significant impact on research and development, programmatic budgeting, acquisitions, doctrine development, and employment of future

systems. This action comes at an important time as the United States emerges from a significant period of land-centric operations and faces an era of strategic uncertainty, increased challenges to access, and increasingly limited amphibious assets. Concurrently, geographic combatant commanders have increased the demand for forward-postured amphibious forces capable of conducting security cooperation, regional deterrence, and crisis response.

The current challenge is to determine how to balance finite logistical capacity against wide-ranging operational imperatives. This is not a new phenomenon. The basic building block of our MAGTF, the Marine expeditionary unit (MEU), has rarely, if ever, deployed all desired assets within the space constraints of amphibious shipping. Commanders are challenged with configuring the force with a greater emphasis on space constraints as opposed to strictly on mission analysis. Thus, there is a requirement to tailor MAGTFs for the most likely missions while accepting risk against the least probable. Incremental improvements and “business as usual” will not satisfy this objective.

The process of leveraging emerging technologies should begin with a bottom-up reevaluation of all systems from individual equipment through large principal end-items with a specific focus on making each system smaller, lighter, and more efficient whenever possible. The accumulation of small savings at each level will achieve our ultimate goal: a lighter and more agile MAGTF that is able to conduct sustained operations from the sea. Toward that end, the Marine Corps will pursue the following objectives:

- Reduce the size and/or weight of individual items in the MAGTF in order to accomplish deployment aboard amphibious shipping. With the exception of the KC-130 aircraft, every end-item employed by Marine Corps operating forces must be able to be embarked aboard an amphibious ship. The force must be able to employ the equipment from the ship to shore without pier-side operations. The Marine Expeditionary Brigade (MEB) Assault Echelon must be able to fit onto amphibious shipping within a limit of approximately 280,000 square feet within projected height and weight restrictions. The MEU must be able to fit onto amphibious shipping within a limit of 50,000 square feet within

**Marine Corps Operating Concepts - Third Edition**

projected height and weight restrictions. Consideration should be given to requiring all ground combat vehicles have the capability to have scalable armor protection appropriate to the threat and capable of being embarked separately from the vehicle. To maximize available cube, a concentrated effort will be made to remove QUADCONS from unit allowances (T/Es) and replace them with Joint Modular Intermodal Containers (TAMCN C0077).

- Optimize the MAGTF for sustained operations from the sea in order to project national power across the range of military operations. Self-sufficiency remains a hallmark of an expeditionary force. To that end, the accompanying supplies required by a MEB continues to be up to 30 Days of Supplies/Days of Ammunition (DOS/DOA) while for a MEU it is up to 15 DOS/DOA. This will be balanced by mission requirements, stowage, and use of the naval distribution chain.
- Increase operational reach while reducing the logistical footprint by: strategically positioning supplies and equipment; forward posturing maintenance capabilities; and establishing theater-deployable sustainment and maintenance capabilities. With the exception of self-deploying assets, every item in an infantry battalion T/E must be able to be transported using organic MAGTF assets. No equipment can exceed 25,000 lbs in weight, combat loaded. To meet these standards, items of equipment may require some level of disassembly. Infantry companies must be able to independently operate for prolonged periods without combat vehicle support. The unit must be self-sustainable in an uncertain environment for at least 72 hours. This should directly drive procedures and training and indirectly drive the weight of the force and other avenues for sustainment. The equipping goal would be to significantly reduce the weight of individual items while maintaining the ability of the force to execute Enhanced MAGTF Operations. The individual assault load should not exceed 75 lbs, while the individual existence load should not exceed 150 lbs.

### Marine Corps Operating Concepts - Third Edition

- Further reduce vehicle dependency. Integrate emerging unmanned systems such as the cargo unmanned aerial system (UAS); increase resource efficiency and MAGTF self-sufficiency; reduce equipment density, energy demands and consumption rates. Increase usage of renewable and alternative supplies; reduce our dependence on battlefield contract support; leverage emerging technologies for equipment; and develop the inherent security capabilities provided by support units in order to minimize any draw off combat power for force protection requirements.
- Reexamine/reevaluate the MEU baseline T/E to determine whether current baseline T/E reflects reality in terms of: regionally focused missions; risks associated with most likely missions vice most dangerous; and the combatant commanders' requirements. Continue development and deployment of MEU enhancement capability: a subset of MEU Equipment Set (MEU Slice), i.e., that equipment normally left behind by MEUs, as forward deployed, flexible source of additional gear that may be required due to operational requirements.

Efforts taken to optimize equipment size, weight, force protection, and operational range, augment and streamline the MAGTF commander's ability to embark, deploy, and sustain the forces needed to prevail in future, austere, and uncertain operating environments.

#### ***Command Element (CE) Enhancements***

As the central element of the MAGTF the Command Element, in particular command and control, must adapt as the subordinate elements (SE) and other functions are enhanced. Command will continue to decentralize—and the MAGTF Commander and his staff need to be networked into the major subordinate elements (MSE) to command and facilitate coordination and information flow. Improved communications, over-the-horizon, on-the-move, will aid in facilitating information flow. The system must be resilient—when all communications fail the ability for a small unit leader to complete his mission based on intent, trust and ingenuity remains the unbreakable stopgap for all MAGTF operations.

### **Marine Corps Operating Concepts - Third Edition**

To enhance situational awareness, improved surveillance and reconnaissance is a requirement. This includes technical and human development alike. Increased abilities in human intelligence (HUMINT) collectors, reconnaissance personnel and snipers, supported by increased fidelity from UAS and sensors will tie in with reports from Company Level Intel Cells (CLIC) to create a more descriptive picture of the battlefield. Once the information is gathered and the intelligence is developed, enhanced means of sharing information throughout the MAGTF allows commanders at all levels to better predict and understand enemy actions and maneuver their forces ahead of those of the enemy. With shared information on the battlefield the CE can determine the context of the fight and design the battle plan.

To affect these enhancements, it rests on the MAGTF commander to ensure training space. MSEs require “white space,” realistic training areas and scenarios as well as the ability to train with the tools they are expected to be fighting with. Marines require time to experiment with new technologies and tactics. More importantly, time to train with technology should not impede on the time required by the junior leader to build Marines’ basic skills—nor should it attempt to substitute the development of leadership and trust within a unit—they take time.

As requirements to fight in more austere conditions and in a dispersed manner become more frequent, a central enhancement required across all elements is reducing energy consumption. Less dependency on energy allows the MAGTF to travel lighter—with less fuel and batteries. It allows us to move faster, through the reduction in bulk supplies and the reduction in size and amount of equipment. New technologies and techniques that reduce our cube and weight as well as our dependency on energy allow the MAGTF the ability to conduct operations in the most austere of environments—where excess and luxury is not practical.

#### ***Ground Combat Element (GCE) Enhancements***

The requirement to disperse and decentralize creates increased requirements in mobility, fires, training, sustainment and leader development. The ability to move throughout the battlespace allows the commander to disperse forces and yet retain the ability to concentrate them when the situation dictates.

Mobility advancements are a multi-dimensional issue; first is the ability to move within the environment utilizing organic advancements; second is the ability to find advantage over the enemy through speed. The organic advancements start with the Marine—trained to operate in their environment; physically and mentally fit. A Marine unit must be able to efficiently navigate human and physical terrain. Combat Hunter and other such programs that increase the general ability and field skills of the Marine become vital as the situations they face become more and more unpredictable. The nature of war requires that Marines operate equally well in crowded cities, vast deserts, frigid mountains, blue and green water ways and thick jungles. This concept is a call back to our “Small Wars” ruggedness—requiring competent Marines that can operate and adapt to any condition.

Next we must take advantage of speed relative to our enemy—to mass and disperse as the opportunity arises. New vehicles that provide maneuverability, speed and protection require the ability to traverse over harsh terrain and water, to allow maneuver from the sea. Fuel-efficiency makes it possible to extend distance and increase the rate of action. Vehicles should provide rapid surface options, run faster on less fuel and remain light and deployable aboard ship. The use of alternative delivery means (ex: small boats) can provide clandestine options that offer both speed and surprise; as well as a more practical option for everyday movement in many underdeveloped parts of the world.

As the infantry maneuvers quicker, largely dispersed and with less firepower, fire support faces the unique challenge of disseminated coordination, rapid reallocation of assets and force protection. Current systems, on a distributed battlefield must be placed at a central locale to support as many units as possible or divide their assets and lose the ability to mass fires. New systems combined with training of smaller, mobile detachments with the right weapons-mix to perform direct support (DS) missions and coordination cells pushed to the lowest level possible may be a solution. Increasing combined-arms training and time for experimentation would help Marines to understand fires capabilities and limitations; as well as drive requirements.

Lightening the GCE requirements for energy and supplies provides a faster more sustainable force. Providing food, water, ammunition, casualty evacuation (CASEVAC) and fuel present some of the most difficult challenges on the battlefield. The less a unit requires to operate, the less dependant it is on a supply chain. Food can be foraged or bought locally, and in some cases provides an invaluable connection with the local populous. Water can be acquired and purified locally as well. Better trained and equipped Corpsmen and Marines can provide longer-term care to the wounded and ill.

### ***Aviation Combat Element (ACE) Enhancements***

The enhancement of the ACE in EMO centers on the MAGTF's requirement to disperse and decentralize. This will subsequently create new or expanded requirements for mobility, fires, training, sustainment and leader development within the ACE. The ability for the GCE Commander to disperse his units throughout the battlespace and yet retain the ability to rapidly concentrate without straining his lines of supply will fall largely on the ACE. Maneuver and fires will remain the key capabilities the ACE provides to the GCE but those aviation units must be able to do more with less. The enhancement of the ACE, simply put is that— it has to be more FLEXIBLE.

The ACE can improve its flexibility and capabilities in the expeditionary environment in three areas—by becoming lighter, better networked and developing Marines with diverse MAGTF backgrounds. These improvements in turn will positively affect all the ways the ACE supports the CE, GCE and LCE.

First the ACE must become lighter, not in the size and weight of the aircraft necessarily, but in the size of the footprint required to operate them. This can be done by constantly improving our existing aircraft as well as those entering service in the future with the primary end-state desired being a group of platforms that require significantly less maintenance and are serviced by a much more versatile group of ground support equipment (GSE). Future GSE must have the ability to perform multiple functions and to be able to service a variety of platforms—all the while taking advantage of technological advances in miniaturization and weight-saving composite construction to lower its overall logistical

### Marine Corps Operating Concepts - Third Edition

footprint. Furthermore, the ACE must create additional full-system qualified maintainers that have the cross training and experience to service an entire platform rather than a specific aircraft system. Lightening the ACE also must look at reducing the amount of petroleum, oil and liquids (POLs) that fuel our fleet of aircraft—manned and unmanned. Collectively these aircraft must be able to be more fuel-efficient as well as have the ability to operate using a variety of fuels—from JP8 to biofuel. Expanding on this theme, there may be a requirement for a light-attack platform to add to the ACE inventory; one which can perform multiple missions; filling in the mission seams between our Joint Strike Fighter (JSF), MV-22 and rotary aircraft—including escort of assault aircraft, point resupply and medical evacuation.

Next the ACE must become better networked both within the aviation component and within each component of the MAGTF writ-large. The JSF will present the ACE with a great opportunity, as the first step toward true network integration. The JSF has the capability and capacity to collect, process and distribute vast amounts of information, yet there are still numerous limitations to its ability to fully integrate with the other platforms in the Marine inventory or Command and Control systems within the GCE. The networking capability and sensors developed for the JSF need to be migrated to the other platforms in Marine aviation and integrated into Marine Aviation Command and Control to enable the expected information-sharing required between dispersed elements of the MAGTF. Furthermore, the ACE must be able to provide the information collected and processed to the rest of the MAGTF in an accelerated fashion.

The ACE should be able to provide the MAGTF with a common, secure data link capability and improved long-range communications suite to counter line-of-sight complications resulting from operations in extreme geography or at extended distance. The result of these communications enhancements will allow the ACE to be more responsive to the respective needs of the CE, GCE and LCE with Fires, Logistics, Mobility and C2.

Finally, there must be a cultural shift within the aviation community to expand non-flying (b-billet) opportunities for aviators and aviation

### Marine Corps Operating Concepts - Third Edition

Marines. Education opportunities and billets (Joint and service) outside the cockpit or squadron should be embraced for their overarching contributions to the ACE in the development of well-rounded and experienced MAGTF officers. The specialization required within Marine aviation is such that many Marines are not encouraged to expand their knowledge and experience in other MAGTF billets without negatively affecting their proficiency in the air as well as the negative impacts of being away from their respective tactical community.

The MAGTF of the future will need more Joint Terminal Air Controllers (JTACs), employed at the lowest echelon possible. The natural propensity aviators have to perform the terminal controller mission as an operator or instructor cannot be overlooked. Aviators should be encouraged to do shorter recurring tours as controllers throughout their career; first as operators then as instructors. Additionally, command and staff billet opportunities earlier in an ACE officer's career, such as planning staff, training command, and headquarters have numerous benefits across the MAGTF that are often blurred when seen through the existing lens of what constitutes a "normal" career path for an aviator. We must endeavor to create these opportunities to expand our officer and non-commissioned officer corps' expertise outside of the ACE. With the experience gained as operational and tactical planners and commanders, ACE officers will enhance their ability to understand how the ACE can better contribute to MAGTF success—from an air or ground perspective.

The resulting benefit of the aforementioned enhancements to the ACE will be a more responsive, networked, flexible MAGTF regardless of the geography or situation presented by future operations.

#### ***Logistics Combat Element (LCE) Enhancements***

The elasticity of the enhanced MAGTF provides some of the greatest challenges in the area of logistics and the combat support provided by the LCE. Creative solutions to medical care—such as smaller surgical teams and live tissue training for Marines and Corpsmen can aid in more efficiently treating some emergency needs. Engineer elements will have to distribute as well and be prepared to detach smaller teams to smaller units—disseminating expertise rather than labor. Purchasing officers may need to disseminate their capabilities to provide food and water

from local sources to elements as small as companies and platoons. Mechanics and technicians can create contact teams to service separate units, or train operators in higher levels of maintenance at the local level—rather than attempting to return broken material to a central source.

The LCE must lead the way in creating lighter and more efficient means of supply, maintenance, engineering and emergency care. As the GCE becomes more fluid and flexible the LCE must adapt with it—and keep step with changing pace of the GCE. It must predict the needs of the MAGTF and prepare to support any unit—regardless of mission.

Like all parts of the MAGTF this begins with training and education. Non-traditional career paths create a wealth of creative ideas that will feed the force and prepare it for a changing world. Increased business, joint and international exchange programs will provide a wealth of experience; facilitating unique solution sets, creativity and enabling comprehensive military and industry collaboration. In addition, the LCE must increase its ability to organically defend supply lines and forward arming and refueling points (FARPs) as well as conducting operations in support of their defense. As the remainder of the MAGTF increases flexibility, the LCE must increase its creativity and be prepared to support increasingly fluid and dynamic situations.

## **Warfighting Functions**

- ***Command and control*** coordinates all other functions and therefore must evolve as the other functions advance. The critical element is design and the understanding of design—this shapes a commander’s total understanding of the context of the battlefield and how he will conduct his campaign. To do so the commander requires feedback from his MSEs as well as an understanding of the enemy, the culture and the political context in his area of operations. Enhancements in the tools that aid in the flow of information, expertise on the staff that aids the commander in his understanding of the information, and the training and tools that aid in the control and movement of units, better prepare the force to conduct operations in a complex and distributed environment.

- ***Maneuver and mobility*** face some of the largest challenges as operations become more decentralized. The need to maneuver across multiple types of terrain at a pace faster than the enemy; and maintain the ability to concentrate forces to mass when the opportunity presents itself is vital and should drive any enhancements. A mix of developments are required to improve upon maneuver and mobility—increased individual physical and mental fitness levels, improved land navigation skills, improved marksmanship training, terrain specific training and leadership development are areas to investigate on the human side. Material solutions should investigate more fuel efficient vehicles, multi-terrain vehicles and the reintroduction of small boats. Any material solution must keep in mind our naval and expeditionary nature and account for the deployment of vehicles aboard amphibious shipping.
- ***Intelligence*** collection and dissemination enhancements provide the maneuver forces and the MAGTF commander greater insight into the enemy and the context of the battlespace. The introduction of Human Terrain Teams (HTT) increased human intelligence (HUMINT) and increased surveillance and reconnaissance by ground forces as well as aviation platforms such as a networked Joint Strike Fighter and Raven UAS is tempered by a logical dissemination program. Intelligence and information needs to flow throughout the force in a rapid, palatable manner.
- ***Fires*** support improvements come in the form of fire support coordination and responsiveness. JSF provides a great deal of awareness as an extension of the fire support coordination center as well as responsive, scalable fire power. Combined with rotary wing close air support (CAS) assets and JTACs, the cumulative overwhelming capability for precise, lethal fires, provide a great deal of depth in fire support. Airborne assets alone are not the fires solution. Artillery and naval gunfire enhancements that provide responsive, all-weather options to a decentralized force are vital to increase the lethality of the distributed force. These capabilities must also be scalable in range, portable and lethal,

### Marine Corps Operating Concepts - Third Edition

with the ability to incorporate network operations such as Information Operations (IO) messaging as well.

- ***Sustainment*** must adapt to overcome the distance between and the differing needs of dispersed forces. In addition to prohibiting an increase in the variety of supplies there is a requirement to protect longer lines of communication (LOC). In addition to seeking material solutions such as unmanned air delivery vehicles, enhancements to the means of supply can provide the maneuver force a greater ability to sustain itself. In prolonged operations maneuver forces can forage and purchase some classes of supplies with proper training and funding. In addition other material solutions such as fuel efficient vehicles and less battery dependant electronics, as well as a general lightening of the force, lessen the need for supplies. Simply put, a general reduction of unnecessary supplies and equipment will reduce sustainment needs.
- ***Force Protection*** needs increase as the force distributes. Longer LOCs require a robust and detailed force protection (FP) plan. Units, that normally rely on adjacent and supported forces to provide FP as well as small elements that normally benefit from mutual support must now provide their own FP, potentially causing a loss in manpower to accomplish the mission. Material and training advancements should seek to decrease this draw on manpower and aid the unit in mission accomplishment via technological and doctrinal advancements.
- ***Information*** is suggested to be added as the seventh warfighting function. Information, disinformation, psychological operations, cyber attacks and defense are persistent elements on the modern battlefield. Combining the efforts of Strategic Communications, Information Operations and Public Relations takes into account that the story told about a bomb that is dropped is more powerful than the bomb itself. Understanding information and how it affects the battle is vital on the modern battlefield and will be even more so in the future.

**Marine Corps Operating Concepts - Third Edition**

Below is a proposed EMO Capabilities Matrix created to assist with adding specific detail to the requirements for the development of EMO in an effort to continue to promote the evolution of the MAGTF to counter the anticipated threats the Marine Corps will likely face in the uncertain operations of future campaigns.

<b>Function</b>	<b>Essence</b>	<b>Crux</b>	<b>Enhancements</b>
<b>C2</b>	Decentralized execution synergized by commander's intent	Shared situational awareness (up) and dissemination of commander's intent (down) across domains in remote and complex environments.	Proliferate agile decision-makers, promote an environment of trust and initiative, develop decision tools that enable sharing SA and intent
<b>Log</b>	Transportability & Mobility	As units operate in more dispersed, less linear formations, the physical limitations of logistics remain constant.	More self- supportive units; lighter more efficient , leveraging technology alternate fuel sources, water purification and unmanned systems
<b>Fires</b>	Integrated & responsive	Maintain all-weather combined arms synergy and Force Protection while both fire and maneuver forces are dispersed.	Non-traditional relationships, automated observer to FSCC/ FDC tools, lighter more deployable fire systems, JSF
<b>Maneuver</b>	Gain/Maintain relative advantage to concentrate and disperse	Mobility over varied terrain and domains	Mission vehicle mobility sets to optimize for terrain
<b>Intel</b>	Ability to process information into knowledge at the point of action	Real time collection, fusion & dissemination of intell elements and intuitive products	Intel cells at lower level/ improve intel networks Tailored, automated and balanced Information pull (passive) and selective push.
<b>Force Protection</b>	Protection over all domains, inclusive and proactive.	Absence of mutual support	Enhanced networks, comms, fires, mobility
<b>Information</b>	Induce self-disadvantagious action by the enemy	Timely pattern recognition	Information planning and execution throughout all levels of command.

Figure 1

## **EMO Capabilities**

In order to meet these challenges the following questions and capability metrics are offered for refinement and future development.

## What capabilities are needed to conduct Operations?

### Maneuver Unit Organic Capabilities

- Battalion (BN)
  - C2 - voice to team level, data to platoon level
  - Fires – kinetic, non-kinetic, IO, Public Affairs (PA), translators
  - Maneuver – med/ heavy airlift, LCAC (H2O maneuver)
  - Intel – human terrain/ environmental, target population
  - Force Protection – nonlethal options
  - Logistics – water purification, ground transportation, contract-generation (engineering, transport), medical 1 FRSS – 1STP attached to distributed BNs (72 hrs of trauma medicine), dental, area/environmental assessment capability, air-drop support, robotics
  - IO – dedicated IO cell capable of integrating Psychological Operations (PsyOps), military deception, EW, Operational Security (OpSec) – and planning BN operations that integrate company level realities with strategic goals. The cell must also be able to coordinate Joint, Interagency and coalition assets.
  - Civil-Military Operations (CMO) – CA team capable of coordinating civilian/police engagements providing personnel support to the company level and acting as special staff to the BN commander to coordinate tactical-level projects with operations and strategic goals, and coordinating Joint, interagency and coalition efforts and resources into the BN plan.
  
- Company (CO)
  - C2 – voice to team level, data to platoon level
  - Fires – experienced FiST leadership, FDC, ability to utilize non-standard relationships, advanced PLI capability; dispersed fires
  - Maneuver – transportable within surface and vertical limits
  - Intel – HUMINT, MASINT cell, Tier 4/5 UAS access (fed from MAGTF), connection between CLIC and MAGTF S/G-2
  - FP – lethal, non-lethal, robotics

### Marine Corps Operating Concepts - Third Edition

- Logistics – supply clerk, 1 IDC per CO, 1 OEMS Corpsman per squad + 1 DMOC trained Marine per team, man portable H2O purification
- IO – 2 man IO cell to CO level provided from BN IO cell
- CMO – squad CA attached, enabler from MAGTF
  
- Platoon (PLT)
  - C2 - voice to individual
  - Fires – support for CO, type II CAS capable
  - Maneuver - foot mobile
  - Logistics – 1 OEMS Corpsman per PLP, 1 OEMS Corpsman per squad, 1 DMOC trained Marine per team
  - Intel – data feed from CLIC
  - FP – training

### Parent MAGTF Enabling Capabilities

- MEB
  - C2 – command element capability to connect the BN with all elements and assets
  - Fires – kinetic, nonkinetic
  - Maneuver – med/ hvy airlift, LCAC
  - Intel – human terrain, environment, target population
  - FP – nonlethal
  - Logistics – scalable, modular, adaptable
  - IO – dedicated IO cell, capable of integrating PsyOps, military deception, EW, OpSec & cyber security – and planning MAGTF operations to integrate Joint interagency and coalition assets
  - CMO – CMO staff function at the MAGTF level to integrate, coordinate and design tactical level CA and Poli-Mil plans and operations within the construct of operational and strategic goals. The staff integrates Marine, Joint, interagency and coalition efforts and resources.
  
- MEU
  - C2 – command element capability to connect the BN with all the elements and assets
  - Fires – kinetic and nonkinetic
  - Maneuver – med/hvy airlift, LCAC

### Marine Corps Operating Concepts - Third Edition

- Intel – human terrain/ environmental, target populations
- FP – nonlethal
- Logistics - modular
- IO – dedicated IO cell, capable of integrating PsyOps, military deception, EW, OpSec and cyber security – and planning MAGTF operations to integrate with strategic goals. The cell must also be able to integrate Joint, interagency and coalition assets
- CMO – CMO staff functions at the MAGTF level to integrate coordinate and design tactical level CA and Poli-Mil plans and operations within the construct of operational and strategic goals. The staff integrates Marine, Joint interagency and coalition efforts and resources.

## **What Capabilities are within a given echelon’s ability to command and control?**

### Maneuver Unit Organic Capabilities

- Battalion – Command of Joint, Coalition, maneuver, fires & reconnaissance, terminal control of aviation and operational fires (including AC130 – 2025)
- Company – Command of Joint, Coalition, maneuver, fires & reconnaissance, terminal control of aviation and operational fires (including AC130 – 2025)
- Platoon – Joint, Coalition direct support – and terminal control of fires to include aviation fires

### Parent MAGTF Enabling Capabilities

- MEB – Joint Coalition, Interagency – maneuver, fires, intelligence, IO, special operations
- MEU – Joint, Coalition, maneuver, fires, intelligence, IO, special operations.

## **How big should the operating radii of the maneuver units be once ashore?**

### Maneuver Unit Organic Capabilities

- Battalion – 165 NM

Marine Corps Operating Concepts - Third Edition

- Company – 15 NM
- Platoon – 5 NM

Parent MAGTF Enabling Capabilities

- MEB – 365 NM
- MEU – 165 NM
- SPMAGTF – mission dependant

**How long will they operate before needing reinforcement or withdrawal if under attack?**

Maneuver Unit Organic Capabilities

- Battalion – 16 hours
- Company – 8 hours
- Platoon – 4 hours

**How quickly will units need to aggregate for emerging missions that require massed forces?**

Maneuver Unit Organic Capabilities

- Battalion – 10 hours
- Company – 5 hours
- Platoon – 1 hour

Parent MAGTF Enabling Capabilities

- MEB – 10 hours
- MEU – 5 hours
- SPMAGTF – 1 hour

**What reaction force capability and response time must the MAGTF be able to provide?**

Maneuver Unit Organic Capabilities

- MEB – up to a BN Task Force in < 16 hours
- MEU – up to a Co Task Force in < 8 hours
- SPMAGTF – up to a PLT in < 4 hours

**What geographic environments-urban, desert, mountain or jungle-should units be organically optimized for?**

Maneuver Unit Organic Capabilities

- Primary – urban
- Secondary – mountain