

# The Role 2 Light Maneuver Element

The MAGTF commander's lifesaving platform of choice  
in a new era of warfighting

by LCDR Benjamin Chi & ENS Duncan Carlton

The Commandant of the Marine Corps' (CMC) *Commandant's Planning Guidance* for 2019 (CPG), based up the realignment of prioritizing Great Power Competition in the 2017 *National Defense Strategy* (NDS), is a road map for dynamic change to both the task organization and warfighting doctrine of the Marine Corps. One of the central tenets of this concept is the refinement and full implementation of Distributive Operations (DO) as an operational paradigm to challenge near peer adversaries during deterrence and shaping phases of conflict. This form of warfighting is predicated on the ability of small formations, company size and below, to operate independently within an opponents' weapons engagement zone along undefined fronts potentially hundreds of miles apart, an area dubbed the "Competition Space." The CMC's recent reorganization of 3d Mar into the Marine Littoral Regiment (MLR) demonstrates the urgent commitment to change. These new DO elements are expected to conduct the full spectrum of combat and combat-support functions independently in pursuit of their mission against the entire continuum of aggressors, from irregular non-state actors to near-peer enemies. As these battlefield formations change, evolve, and adapt to this new way of war, the medical units supporting the Marine Corps must reconfigure to align with these changes. Here, we discuss these challenges and how development of a Role 2 Light Maneuver platform can fill the void for Navy medicine in the era DO.

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**"We will always focus on people over systems in the command and control process."**

**—Gen Berger, 38th Commandant of the Marine Corps**

## The Challenge

One of the most groundbreaking declarations in the CPG is the call for revision of the amphibious shipping based MEU in favor of a more integrated maritime force across all naval shipping platforms. The CMC declared that future MAGTF will radically vary in size and composition depending on the mission set. This means the current medical planning, which assumes secure medical stations with robust big deck amphibious shipping medical/surgical bay capability on call, is no longer valid. Additionally, surgical assets are only

doctrinally dedicated to the level of the MEB, or regimental level, which means providing the surgical and resuscitative platforms in direct support of company size formations requires revisiting the assumptions shaping medical support.

This is not the first time in recent history the medical community has faced the challenge of providing forward resuscitative and surgical care to isolated small units. During the height of the War in Afghanistan 2009–2010, the geography of Helmand province along with recurrent poor flight conditions and concurrent offensives made the

realities of supporting “Golden Hour” from the Role 2 and Role 3 platforms at the two Regimental Forward Operating Bases and Camp Bastion’s Field Hospital exceedingly difficult. To negate this series of problems, RADM Hancock created the seven-ton trailer mounted Mobile Trauma Bays, which found a way to bring the providers to the fight, effectively bringing resuscitative capabilities within hundreds of meters of the point of injury.<sup>1</sup> That same ingenuity needs to be employed to optimize our medical platforms for a coming maritime intensive fight.

**The New MAGTF: Evolving How We Fight Requires Medical Officers to Reimagine How We Save Lives**

The realities of the battlefield have changed greatly in the last fifteen years, leaving behind the large Forward Operation Base paradigm of early Operation IRAQI FREEDOM and Operation ENDURING FREEDOM. Instead, today’s warfare requires rapidly deployable forces capable of operating in austere, far-forward outposts. Our current doctrinal medical platforms are ill-suited for warfare at this smaller level, lacking the mobility and requiring large, logistically complex footprints. It is time for a platform to support this type of fight and fill the gaps between the Role 1 and our definitive care platforms. Currently, the most agile medical Role 2 platform available to the Marine Corps is the MEB’s Shock Trauma Platoon (STP) with an augmented Forward Resuscitative Surgical System (FRSS). Comprising of approximately 40 personnel, capable of receiving and stabilizing a dozen critical casualties with the ability to support 48–72 hours of follow-on patient holding capability, this platoon-sized element is the smallest true doctrinal Role 2 element of the Corps. It is not designed to operate independently and is dependent on host Marines for security, communications, logistics, and maneuver, which limits their ability to quickly redeploy across the theater to points of friction during a dynamic campaign. While the STPs on MEUs often reorganize themselves into trauma squads to provide a forward resuscitative capability to elements such as the



**In Iraq and Afghanistan, Shock Trauma Platoons with Forward Resuscitative Surgical Systems provided life-saving care in austere forward locations. (Photo by Cpl Kyle McNan.)**

Maritime Raid Force, they lack surgical capability and are without the internal lift capability and tactical acumen to move securely. This capability is a hard requirement operating in contested air and sea space.

**Enter the Role 2 Light Maneuver Element**

This reality is not isolated to the Marine Corps but to the entirety of

the DOD because operations globally have moved to operating in more “Grey Zone”<sup>2</sup> theaters in austere environments, where forward positioning of entire medical infrastructure is impractical. To solve this, the other Services have added a new tool to their arsenal, fielding what *Joint Publication 4.02, Joint Health Services*, calls Role 2 Light Maneuver Elements (Role 2 LM).<sup>3</sup> These Role 2 LMs are squad-sized ele-



**For distributed operations in the “gray zone,” the Role 2 Light Maneuver elements can provide squad-sized scaled-down versions of the STP/FRSS. (Photo by Cpl Jamin Powell.)**

Team	Branch	OR Tables	Total Personnel	Surgeon	Anesthetist/CRNA	EM/ICU Physician	Orthopedic Surgeon	PA/IDC	Critical Care	EM Nurse	Practical Nurse	Medic Corpsman	Surgical Tech	Respiratory Therapist	Admin & Support
Forward Resuscitative Surgical Team (FRST)	USA	2	20	2	2	2	2		2	2	2	1	2		1
Golden Hour Offset Surgical Team (GHOST) *Phasing out*	USA	2	10	2	2					2		2	2		
Austere Resuscitative Surgical Team (ARST) *New*	USA	1	10	1	1	1		1	1	1		3	1		
Special Operation Surgical Team (SOST)	AFSOC	1	6	1	1	1	1		1				1	1	
Ground Surgical Team (GST)	USAF	1	6	1	1	1			1				1		1
Expeditionary Resuscitative Surgical System (ERSS)	USN	1	9	1	1	1		1		1	1	1	2		
Shock Trauma Platoon with Forward Resuscitative Surgical System (STP/FRSS)	USMC	2	40+	1	1	1	1	1	2	2	4	15	2		10
Forward Reconnaissance Surgical Team (FRST)	USMC	2	6	2	1	1	1	(1)*	1			(1)*			

\*Can augment from embedded unit Role 1 as required for casualty volume

**Table 1. Task Organization of Selected Service Role 2 Light Maneuver Platforms.**

ments, often scaled down versions of their respective traditional Role 2 platforms such as the STP/FRSS, capable of rapid, often man-portable, deployment of field resuscitative and surgical capability to austere areas in support of limited duration operations. Over the last five years, these elements have filled the gap between the Role 1 and traditional Role 2 capabilities within grey zone environments and in theaters of reduced or degraded medical infrastructure. Unlike the STP/FRSS, these elements are designed to triage, stabilize, and support casualties of smaller, company-sized formations and maneuver with their supported elements without burdening them to provide lift and sustainment. Without resupply, these one to two surgical bay teams are typically limited in resources to stabilizing four to six critically wounded patients but are capable of expanded surge capacity with external resupply or augmentation of host unit medical providers. Much like a direct support engineer platoon or signals intelligence team, these teams come self-sustaining in order to maximize mobility while minimizing drain on GCE. Efficiency and expediency are the tenants of this force concept. The concept has become so well vetted that the DOD Joint Trauma Service has is-

sued formal Austere Resuscitative Surgical Care Clinical Practice Guidelines in 2019, which outlines how to staff, build, train, and employ a Role 2 LM. The following section is an overview of the current Role 2 LM Forces, as seen in *Table 1: Task Organization of Selected Service Role 2 Light Maneuver Platforms*.

Over the past several years, the Army has fielded several surgical team configurations to meet the Role 2 LM capability requirements for specific missions and theaters. It has settled upon the recently updated twenty-person Forward Resuscitative Surgical Team (FRST), designed for split operations with two identical elements—both capable of damage control resuscitation and surgery. These medical elements are all resident within the conventional Army Medical Corps and are assembled and deployed directly from the medical treatment facilities (MTFs) or civilian centers. For support to unconventional and special operations forces (SOF) operations, force employers often reconfigured FRSTs to provide surgical care with smaller footprints, often conducting Golden Hour Offset Surgical Trauma (GHOST) missions or Austere Resuscitative Surgical Team missions with these conventional surgical teams.

The Air Force developed a lighter and more man-portable model instead, investing in a free-standing independent team under Air Force Special Operations Command called Special Operations Surgical Teams (SOST). These teams train to deploy independently to theater as dedicated support to SOF. SOSTs are designed to be independent maneuver elements purpose-built for SOF support. Additionally, these teams are tasked with conducting independent medical advisory missions in permissive operational areas. Team personnel complete a formal selection process then are assigned on permanent duty outside of military MTFs to work clinically at high-acuity civilian trauma centers. Following the success of SOSTs, the Air Force fields a similar but not identically capable model for conventional forces, the six-person Ground Surgical Team also detailed in Table 1.

Between these two models is the Navy Expeditionary Resuscitative Surgery System, which was designed to solve the same problems the Marine Corps was facing for Naval Special Warfare (NSW). These teams are resident personnel to the MTFs but are assigned and trained to deploy out in support of NSW units operating in maritime or subsurface environments. These teams



conduct formal tactical and technical training between deployments at dedicated training centers under NSW instruction.

**A Case Study: III MEF’s Forward Reconnaissance Surgical Team-1**

The Marine Corps, the only Service without an established platform, fabricated many variants over the years with varying success but remains without a standing, doctrinal Role 2 LM. One of the more successful models was the III MEF prototype, the FRST-1, a Medical Battalion Role 2 LM that was under operational control of Force Reconnaissance Company (FORECON). The FRST-1 offers a sound foundation to develop a standing platform for future operations. The following is a discussion on the success of the III MEF model and why efforts to reproduce the team failed.

In 2018, FORECON, III MEF was tasked with providing security for the Vice-Presidential Delegation, along with 1st Special Forces Group, in Papua New Guinea. FORECON, recognizing the austerity of the operation and potential danger of given local unrest, requested 3D Medical Battalion provide a tactically integrated, light surgical team, capable of medical resuscitation, damage control surgery, and prolonged patient holding. Working with the FORECON Dive Medical Officer and 1st Special Forces Group Battalion Surgeon, 3D Medical Battalion developed a six-person team and associated training package, using a combination of the MEU Maritime Raid Force enabler training package and the force design of other Role 2 LMs. This test unit was called the Forward Reconnaissance Surgical Team-1, the composition of which is described in Table 1.

In subsequent iterations, 3D Medical Battalion attempted to reassemble the team, but instead of assembling volunteers around an experienced cadre, they assigned personnel to the mission while the original members were TAD elsewhere. This iteration was disbanded following a pre-deployment interoperability exercise with FORECON when the Senior Medical Officer with FORECON deemed the team mission inca-

pable due to critical failures observed in team dynamics during mass casualty drills and technical incompetence in conducting medical operations in a field environment.

**Lessons Learned: Pillars to Developing an Effective Role 2 LM**

Recent AARs from Army FRST/GHOST teams in Syria and Iraq, specifically from 2019, echoed the difficulties of the second iteration of FRST-1, citing the inability to integrate non-volunteer physicians and surgeons and the lack of pre-deployment training in tactical maneuver, weapons handling, and full-mission profile rehearsals left the FRST/GHOST unusable in many cases and restricted operations for the supported assault force.

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In reviewing the FRST-1 and GHOST AARs along with the Austere Resuscitative Surgical Care Clinical Practice Guidelines, we fell the following lines of efforts will be critical to establishing an effective Role 2 LM:

- *Integrated Adjacent Training.* The FRST-1 team’s success was largely due to early and consistent integration with their supported maneuver counterpart, III MEF FORECON, something that the GHOST AAR lamented as a gap. FRST-1 being operationally detached to FORECON gave the team the access to the critical tactical training, expertise, and resources to prepare for employment alongside their supported element. While units such as Medical Battalion and the LCE provided excellent logistics support for medical units, they are poorly suited to provide this training. While the platform should remain resident within the Medical Battalion, we recommend that FORECON Companies assume the

mission for training the platform for deployment (like FRST-1 or the MEU enabler model). FORECON has the inherent support infrastructure and contains the Marine Corps’ resident experts in small team fieldcraft and prolonged field care with its cadre of Reconnaissance Marines and Special Operations Independent Duty Corpsman. Additionally, FORECON is a force provider by design for the MEF, responsible for training and detaching out its platoons for deployment to supported commands, thus making formalizing this relationship the sound choice.

- *Establishment of Dedicated AMAL and Table of Equipment.* Both AMALs for the STP and FRSS were required to be leveraged to support the team’s minimal footprint. Identifying and drawing the pertinent equipment was a multi-day logistics operation and a drain on manpower. This method of “robbing Peter to pay Paul” comes to the detriment of the STP and FRSS platforms at the Medical Battalion as both AMALs are degraded to support the efforts. Additionally, the FRST-1 had to draw large portions of its personal kit, such as large volume rucks, night vision, weapons, and armor and mobility items from FORECON to begin training. As the platform is designed to be a direct support asset capable of reassignment throughout the AO, the teams need to be logistically independent of their supported units. Also, much of the unique equipment employed by the team (backpack oxygen compressors, portable whole blood containers, etc.) are completely foreign to the supply chain of most units. Given the above, we recommend that the table of organization and equipment (TO&E) be updated for the medical battalion to reflect the requirements of the team, to include weapons, optics, night vision, personal kit, vehicles, and an updated AMAL.
- *Continuity of Skills.* Much of the failure to repeat the FRST-1’s success lies in the lack of institutional knowledge that was available during the second iteration. With all of the original team member’s reassigned to other missions, there was no institutional knowledge

to guide the development of follow-on teams. To prevent this, team assignments should be made with the intent to develop and sustain institutional knowledge to drive refinement and development of the platform and its deployment doctrine. Consideration should be given to development of an Additional Qualification Designation to support personnel tracking for assignment. This paired with the formal relationship with the Reconnaissance community should develop a healthy well of institutional knowledge.

### A Call for Action: The Navy/Marine Corps Role 2 LM

The FRST-1 model provides a starting point for the development of a sustainable Role 2 LM for company-sized units. We recommend that the first iteration of the new Role 2 LM be built around the following structure:

**Task Organization:** The six-person, two vehicle model, as proven by both SOCOM and JSOC, is light enough to maintain mobility without sacrificing damage control resuscitation/surgical capability. While the FRST-1 task organization was built around a physician heavy model, the Navy maintains a large corps of highly capable, battlefield experienced physician assistants (PA), certified registered nurse anesthetists, independent duty Corpsman (IDC), and nurse practitioners who can provide an expanded pool of personnel to draw from, adding flexibility to the manning problem. As with all things, the right person for the right position should take precedence over rank or degree when it comes to assignment. Ideally composed of:

- x1 Emergency Medicine Physician
- x1 General Surgeon
- x1 Orthopedic Surgeon\*
- x1 Anesthesiologist/ Certified Registered Nurse Anesthetists
- x1 IDC/SOIDC/Emergency Medicine PA
- x1 Critical Care Nurse

\*Can be replaced with a General Surgeon depending on mission requirements.

**Capability/Capacity:** For planning purposes, the unit is capable of stabilizing 4–6 critically wounded Marines

with 48–72 hours of patient holding on internal resources alone, supported with 1–2 surgical bays depending on task organization. This is easily expanded through external resource augmentation (air delivery, host unit medical providers/corpsman, walking blood bank, HST resupply) or aggregation of multiple Role 2 LMs during the planning stage, creating a STP/FRSS level capacity. Additionally, the team should come organic with two vehicle light lift specialized for casualty movement of litter borne patients, such as the MRZR and travel with three-day supply of water and rations.

We also recognize the Role 2 LM is not a panacea for all future Marine Corps medical problems or is this a call to disband our currently proven medical platforms; the place and need in high intensity combat operations is established and proven. Instead, we want to add to the quiver a new platform capable of meeting these new requirements generated by the CPG by providing a building block for effective medical support within the DO force model. With future Marine Corps deployment being focused on challenging the enemy within the “Competition Space,” the ability to have mobile, scalable medical assets is essential to ensuring the survivability, and lethality of these smaller elements.

### The Way Ahead

To ensure the Marine Corps has the ability to internally support the CMC's new force design, the Marine Corps needs to partner with the Navy and begin developing scalable platforms to support the future of its warfighting doctrine. Consideration should be given to the fact that medical providers capable of operating within this next generation R2LM platform are not standard issue personnel from the MTFs and will not be developed in a vacuum or overnight. This will require careful investments in dedicated equipment and training to mature this capability. To this end, we recommend the establishment of test units at each of the MEFs and have them start training and developing doctrine through deployment, refining in stride through feedback from

supported units such as the MLR, allow each successive iteration to hone this capability, and guide the decisions governing development and level of investment the Service will require. As the test unit in III MEF demonstrated, the resources are available to begin immediate fielding, with the next steps being doctrinal refinement and downrange validation of the concept.

In closing, this capability will not spontaneously be created by necessity alone. Unless the Marine Corps demands in-house R2LM platforms, it cannot expect the Navy to allocate low-density high-demand resources such as surgeons, emergency medicine physicians, and nurses on its own. The Marine Corps must explicitly create the demand signal, and only then will Navy Medicine allocate the scarce resource of medical providers to support the mission.

It is incumbent on the Medical Corps to be prepared to support Marines in the next generation of conflict, whenever it unexpectedly comes upon us.

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### Notes

1. Khoa Pelcazr, “Mobile Trauma Bay Brings Medical Care Closer to Battlefield,” *DVIDS*, (1 May 2010), available at [www.dvidshub.net](http://www.dvidshub.net); and Jonathan E. Clarke and Peter R. Davis, “Medical Evacuation and Triage of Combat Casualties in Helmand Province, Afghanistan: October 2010–April 2011,” *Military Medicine*, no. 11, (Oxford: Oxford University Press, 2012).

2. David Carment and Dani Belo, “War’s Future: The Risks and Rewards of GreyZone Conflict and Hybrid Warfare,” *Canadian Global Affairs Institute*, (October 2018).

3. Department of Defense, “Chapter 1: Overview,” in *Joint Publication 4-02: Joint Health Publications*, (Washington, DC: 2018).

*>Authors’ Note: The opinions and assertions expressed herein are those of the authors and do not necessarily reflect the official policy or position of the Uniformed Services University, Department of the Navy, or the DOD.*

