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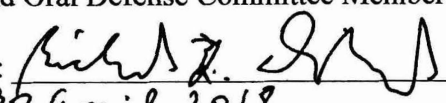
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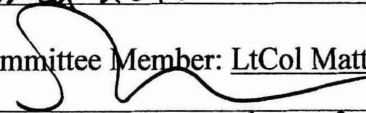
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EXECUTIVE SUMMARY

Title: Winning the Collection and Reconnaissance Fight Before the Battle: The Marine Corps Reconnaissance Regiment

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Thesis: Currently the Marine Air Ground Task Force (MAGTF) is not organized to train, manage, and employ the MAGTF's collection assets effectively to meet current or future requirements, establish and maintain battlefield information dominance in the security area.

Discussion: From the first stages of the C4I concept under General Al Grey to the development of the SRIG and MIG, the Marine Corps has identified and attempted to gain tempo and synchronization through the sharing of information and information management and dispersion. While this allowed units access to more intelligence and provides an opportunity to have a greater common operating picture, it failed to create the tempo of tasking, re-tasking, and queuing collections and reconnaissance assets in the security area. Currently the organization that is charged with the synchronization of collections efforts across all collections and reconnaissance assets is the SARCC. The SARCC provides a common operational picture, but fails to provide any authority to task collections and reconnaissance assets outside of current organic capabilities. To do this requires a consolidation of collections and reconnaissance assets under the Marine Expeditionary Force to provide guidance, tasking, and dynamic task organization to combat the threat in the future environments. This structure will provide benefits in garrison, in innovation, in procurement, and most importantly in harm's way. In concert with multiple future concepts, this shift in task organization and employment would ensure joint interoperability with both the United States Army's multidomain task force as well as other allies efforts to modernize their collection and reconnaissance communities. Some dissenting opinions of this concept will look at the hurdles to the organization as insurmountable, but through the lens of what is most important in the Marine Corps, the ability to fight and win our nations wars, the benefits far outweigh any potential discord.

Conclusion: The creation of a Reconnaissance Regiment that succeeds in managing and tasking the Marine Corps' reconnaissance and collection assets to support the Marine Air Ground Task Force (MAGTF) in managing battlefield information dominance requirements is necessary to win the counter reconnaissance fight and set the conditions for decisive actions across the range of military operations. Unless the Marine Corps correctly identifies the issue and focuses reconnaissance and collection assets under unity of effort and command, the forces will continue to fail to meet the requirement of quicker dissemination and action to out-cycle new emerging threats.

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PREFACE

This paper is a culmination of experiences and frustrations that I have acquired through my time at 1st Light Armored Reconnaissance Battalion and builds on wargames, MEF and Division-Level Exercises, the Task Force Reconnaissance Concept, and experiences with various elements of the reconnaissance, collection, and intelligence communities. This paper is not an endstate and much more work needs to be completed, but it opens the discussion of authority, task organization, and tempo are intimately tied together and that to be successful we must adapt, even if it is uncomfortable. I want to say special thanks to LtCol Michael Nakonieczny for guidance and mentorship, and LtCol Ladd Shepard for concept integration, this would not be possible without your assistance.

INTRODUCTION

Currently the Marine Air Ground Task Force (MAGTF) is not organized to train, manage, and employ its collection assets effectively to meet current and future requirements, to establish and maintain battlefield information dominance in the security area. Individuals in the Marine Corps have identified this gap in its structure multiple times since World War II and have created different structures to meet these requirements such as the C2I concept, the Surveillance, Reconnaissance, and Intelligence Group (SRIG), the Surveillance and Reconnaissance Center (SARC), the Marine Headquarters Group (MHG), and the Marine Information Group (MIG). Each one of these organizations provided the ability to collaborate and create efficiencies, but failed to provide dynamic tasking and ultimately created more strain on the already overtasked G3/G2 sections of both the Division and the Marine Expeditionary Force (MEF). With the emergence of new technologies and the closing of the current military capability gap, the requirement for an agile, scalable, and adaptive force able to provide reconnaissance, security, and counter reconnaissance is more vital than ever before. Without a restructuring of collection and security assets, the MAGTF will not be able to rapidly respond to threats in the future fight. Within the new evolving operating environment, the two most dangerous emerging threats are the enemy's accelerated Intelligence Surveillance Reconnaissance (ISR) Strike System and increasingly effective Integrated Air Defense Systems (IADS), which nullify the United States Marine Corps lethal overmatch advantage relied on since the Gulf War.¹ Without a changing the organization and employment techniques of reconnaissance and collections in the MEF, the Marine Corps will fail to identify and eliminate Anti-Access / Area Denial (A2/AD) threats prior to their employment with catastrophic results.

USMC HISTORY IN INTELLIGENCE, COLLECTION, AND RECONNAISSANCE

In 1989, the Marine Corps and mainly General Alfred Grey identified information paralysis, a major issue in both the functions of intelligence and command and control. The issue was that the increasing sensors, units, and platforms operating with new technology were generating an exorbitant amount of knowledge, much more than in previous operations.² While the quantity of information was increasing, the Marine Corp's ability to process this information in a timely manner and provide it to operational units had not increased leading to a condition known as information paralysis.³ While this issue was apparent at different times in the Marine Corps history, it overshadowed another issue. The lack of unity of effort across the collections community led to delayed identification of intelligence requirements, reconnaissance response, and queuing. General Grey's answer to the identified issue was the development of the Surveillance, Reconnaissance, and Intelligence Group (SRIG) to improve efficiency and mission readiness of the MAGTF.⁴

The SRIG consolidated "surveillance, reconnaissance, and intelligence assets from the Division, Wing, and the Force Service Support Group to collect, produce, and disseminate information and all source intelligence as required in support of planning, and execution."⁵ The SRIG consolidated unmanned aerial vehicle company, Chemical and Biological Incident Response Force, Radio Battalion, and Intel Company to gain intelligence efficiencies. This organization suffered from a lack of doctrinal direction which led to its lackluster performance during Operation DESERT SHIELD and DESERT STORM, with critics calling for its abandonment.^{6,7} Following operations in Somalia, the Marine Corps would disband the SRIG on 7 June 1994 and streamlined the Command and Control of the encompassing units.⁸

Despite the dissolution of the units, the initial intelligence and command and control issues were partially improved under the SRIG but unity of effort and command was not addressed. Commandant of the Marine Corps, General Alfred Gray, identified in his White Letter 01-91 that the Surveillance Reconnaissance and Intelligence Groups must be able to communicate, fuse, and disseminate all types of information across the battlefield.⁹ The organization consolidated all elements available and collected more information collectively than previous organizations, but that did not lead to more responsive fires and maneuver, instead it lead to a lack of initiative due to the sheer amount of information collected.¹⁰

Due to its lackluster performance, the Marine Corps deactivated the SRIGs from all three MEF Commands from 1995 for III MEF to 1998 for I MEF.¹¹ The elements of the former SRIGs were consolidated once again in October 1999 in to the Marine Expeditionary Force Headquarters Group (MHG) which provided command, security, infrastructure, logistics, training and administrative support to the MEF, but not additional intelligence capacity or fusion to the operating forces.¹² This construct gave up on the initiative to process information faster and provide consolidated intelligence to maneuver forces more rapidly. This new structure survived until 2017 when the Marine Corps once again identified that under disjointed intelligence efforts supporting the MEFs could not handle the volume of information provided with existing conditions and the addition of the new cyber domain.¹³ This meant that supported forces were not provided timely and accurate information to operated responsively in the current or future operating environments.

As the Marine Corps began to understand the key effects that cyber operations would have in the future operating environments, the operational intelligence issues became more apparent. Due to future environment studies and wargame results, the Marine Corps reorganized the MEF

Headquarters Groups to stand up the MEF Information Group (MIG) to provide the new capability to handle the new information environment for current intelligence and command and control. The mission of the MIG is to “Coordinate, integrate and employ Information Environment Operations (IE Ops) capabilities in order to ensure the MAGTF Commander’s ability to facilitate friendly forces maneuver and deny the enemy freedom of action in the information environment.”¹⁴ Despite the multiple reorganizations of the MEF elements since 1989, the original problems of intelligence dissemination and responsiveness have remained unchanged throughout. That is because the problem not only lies in the ability to identify and process information, but also in the ability to collect, inform, and dynamically re-task to support collection efforts. While the Marine Corps has invested structure and doctrine in the new MEF Information Group, it will only be successful in supporting the seventh war fighting function, information, but will not improve the original issues to the intelligence and command and control functions. This organization also assumes incorrectly that all intelligence and collection is passive in nature. Fighting for information can be a necessary driver of the intelligence cycle, something the MIG is unable to conduct.¹⁵

CURRENT EMPLOYMENT METHOD’S BENEFITS AND WEAKNESSES

Within the MEF the issues previously identified in intelligence and command and control stem from the doctrinal structure and command relationships between G3 Operations, G2 Intelligence, and collections assets. The doctrinal answer to the coordination and control of units in the security area in the Ground Combat Element comes from the Surveillance and Reconnaissance Coordination Center (SARCC). The SARCC is responsible for “the command and control, intelligence operations direction, coordination, monitoring, and reporting of ongoing and supporting collections operations and reporting.”¹⁶ The SARCC is a task organized ad hoc

structure that is composed of elements and representatives from all intelligence and reconnaissance units. In charge of the SARCC is the SARCC Officer in Charge (SARCC OIC) who is subordinate to the Intelligence Support Coordinator (ISC) and is provided by the senior reconnaissance unit. This temporary structure is normally led by a Marine from the S3 Operations staff from the Ground Combat Element's Reconnaissance Battalion at the Division level and augmented with communications equipment and Marines. Though the SARCC is responsible to coordinate, deconflict, and supervise all reconnaissance and collection efforts in the GCE, it does not have tasking authority over any unit.¹⁷ If a new intelligence requirement is levied, the SARCC will make recommendations based off of available assets to the Current Operations and Future Operations sections in the G3 for tasking. The tasking process takes time to build the situational awareness from the SARCC to the G3, assign a unit, and generate a fragmentary order to provide appropriate tasking authority. This can take even more time as some intelligence requirements necessitate the use of combined collections assets such as Light Armored Reconnaissance and Ground Sensor units, or ground reconnaissance teams and electronic collections, units that need to be task organized from multiple commands that report either to the G2 Intelligence or to G3 Operations.

Once collections units are tasked to operate in the MEF security area, they must be tracked, supported, and sustained by the MEF's plan for operations, logistics, and communications as they are in support of the whole element. These small reconnaissance teams then add to the number of standing Major Subordinate Elements, that the already strained Marine Expeditionary Force must command and control. While this structure works very efficiently if there is only one element involved in the SARC, this coordination lacks the same clarity when multiple collections units begin to interact and this inefficiency will only be exacerbated with the advent of new units and

technologies for the future forces of 2025 and beyond. If collections units require supporting arms, logistical support, or additional resources, then they must be deconflicted by the Ground Combat Element's fire support section contacting and coordinating all other units operating in the security area, which can result in significant delays.

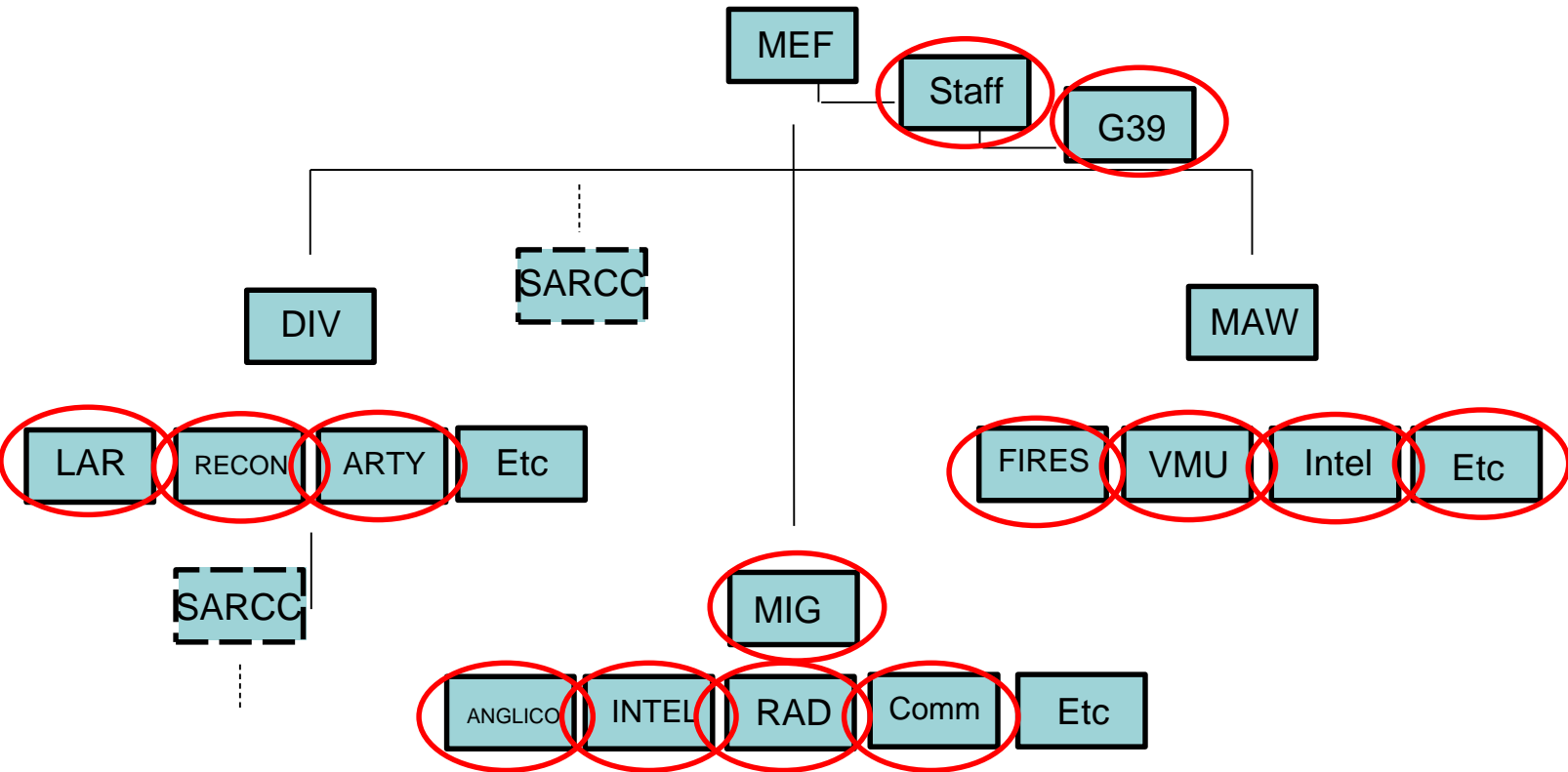


Figure 1. Current MEF Collection and Sensing Table of Organization

Additionally, the situation for reconnaissance and collections assets can rapidly develop or degrade while changing the overall collections picture for every unit working in the security area. These situations can happen at all phases of an operation when the G3 Operations section may or may not have the capacity to coordinate, deconflict, or control the situation. Doctrinally, if a

collection asset such as a Recon/Force Recon Team becomes compromised during a major phase of an operation, they would inform the Reconnaissance Operations Center and the SARCC which would inform G3 Operations and G2 Intelligence of the gap in collections and their course of action.¹⁸ Since this unit was located in the security area, G3 Operations would have to focus on the support and recovery of that team while the SARCC reprioritized the existing Intelligence Requirements. The SARCC would make a recommendation to either gap the collection or dynamically task another unit that could complete the mission. G3 Operations would receive the recommendation and if deemed a priority, send a fragmentary order to the other unit, such as a Light Armored Reconnaissance Battalion to the new mission. This could be happening during critical stages of a breach, amphibious assault, rearward passage of lines, or while in process of transfer of control from the MEF Forward to the Main Combat Operations Center (COC).

One of the major shortfalls that can be identified in the SARCC is the lack of a common operations picture and a common intelligence picture. This is an organizational problem that is not new to the current operating environment. In the Second Battle of Bull Run, the Union Army of Virginia operated their cavalry in a split command reporting to different commanders while the Confederate Army of Northern Virginia organized in a Cavalry Corps that fell under the army. The Union forces conducted reconnaissance in support of independent units but the efforts produced disjointed results that prevented an understanding of the operational picture. Meanwhile the Confederate cavalry was able to quickly task their units to identify the enemy and presented a common operational picture for both wings of the Confederate Army.¹⁹ Just like the civil war, the issue of unified command for reconnaissance efforts in the security area is not new.²⁰ A common commander in the Security Area has been recommended as a result of wargaming efforts from

MAGTF Warrior 2025 and the Marine Corps Warfighting Lab's Counter-Reconnaissance Wargame in 2017.

In 1997, the Marine Corps was conducting an experiment in deep reconnaissance and deep maneuver during Exercise DEEP STRIKE I. During the Exercise, the Marine Corps understood that multiple reconnaissance battalions, Light Armored Reconnaissance Battalions, and additional enablers working towards a common unified goal could not be commanded and controlled effectively through the Surveillance and Reconnaissance Coordination Center, but instead installed a unified headquarters to control and coordinate operations and develop the intelligence picture. This exercise was an overwhelming success that showcased the ability to coordinate and rapidly develop the security area in an amphibious landing across all functions of air, ground, and electronic reconnaissance.²¹ This same problem was presented in Exercise DESERT SCIMITAR 2015, a Light Armored Reconnaissance (LAR) Battalion was attached to a Regimental Combat Team for the duration of the exercise. The LAR Battalion identified a major enemy consolidation on the flank of the RCT that represented a significant threat to the MEF's scheme of maneuver. At the time of this report, the RCT was engaged in an opposed breach of enemy defensive lines, the RCT held the report with this information until the breach was complete. Once the information was provided to the G2 Intelligence and G3 Operations, there was not enough time to shape and collect on the enemy prior to their counterattack. While the enemy attack was not decisive, the report would have been completely unnecessary if all units shared the same common understanding of the intelligence environment. It is vital that unity of effort in reconnaissance and collection not be hindered by lack of unity of command and inadequate command relationships. If the LAR Battalion had presented the same information to the MEF G2 Intelligence and G3

Operations, they would have been able to surge assets outside of the RCT to handle the threat before it engaged with RCT Forces.²²

FUTURE OPERATING ENVIRONMENT IMPLICATIONS

The future operating environment is defined through complex terrain, technological proliferation, and a battle for identification and reduction of signatures on all spectrums.²³ Due to this environment, all collection and reconnaissance assets must work together seamlessly for both reconnaissance and counter-reconnaissance to be successful.²⁴ This requires that units and collection assets are able to cue off each other quickly and efficiently to respond to imminent threats. The current process from collection to tasking a supporting asset currently flows from the collection asset to SARCC and appropriate COC simultaneously, then to the G3 Operations Section where recommendations are received and tasking is assigned.²⁵ While this process worked in the past, the current operating environment and the future environment defined by the Marine Corps Intelligence Agency's Future Operating Environment 2015-2025 will require a more responsive process to gain time from identification to a response.

The United States Army also studied and identified the new operating environment and sought the best way to counter it. Their concept of Multi-Domain Battle is “to deter and defeat increasingly capable adversaries in competition, armed conflict, and a return to competition by calibrating force posture; by employing resilient, cross-domain capable formations that can maneuver on the expanded battlespace; and by converging capabilities across multiple domains, environments, and functions to create windows of advantage that enable maneuver.”²⁶ This Multi-domain Battle concept attempts to merge all of the capabilities that are similarly task organized

under the MIG or are similar reconnaissance and collections assets under the MEF. These units need only to restructure under new authorities and employment techniques to meet the threat. For this force to be successful it must be “cross-domain capable; avoid detection and survive contact with the enemy; maneuver and fight for periods without continuous supply lines or secured flanks; and train cognitively to execute mission command in degraded conditions with tools that allow commanders and staffs to converge capabilities across domains, environments, and functions.”²⁷ This will require a close and dependent relationship with the newly stood up MIG to bring national and cyber capabilities to bear in conjunction with reconnaissance, collection, maneuver, and fires to identify and eliminate threats before they can strike.

In 2014, the Marine Corps re-identified the issue of unresponsive intelligence assets overloaded by information and unable to provide timely and consolidated intelligence to the MEF. The solution was the Intelligence Enterprise according to the Marine Corps Intelligence Surveillance and Reconnaissance Enterprise (MCISRE) published 2014. It “generates tempo by allowing Marines to react faster than their opponents when the battle begins. Intelligence provides unity of effort through sustained focus on the enemy through every phase of the operation.”²⁸ While this occurs in the close and rear areas due to defined battlespace, clear task organization, and single mission and end state, this rarely occurs in the Security Area (deep battlespace). The units typically operating in the security area report to independent battalions, sections, or teams, all with different chains of command with independent missions and end states. For these units to function towards a common goal, or mission, they must work together through various boards, targeting and intelligence cells, and working groups, but this does not prevent a commander from disagreeing and providing alternate guidance.²⁹ While reconnaissance units provide information, and focus on the enemy allowing maneuver units to maintain unity of effort, the reconnaissance

and collections units rarely enjoy that same luxury. All previous organizational structures from the SRIG to the MIG make an attempt at providing that fusion of intelligence and capacity to process additional information but, fail to give the authority, weight, and unity of effort required to dominate the reconnaissance and counter-reconnaissance fight in the current and future environment.

PROPOSED FUTURE FORCE STRUCTURE

In order to meet the future needs of the operating environment in the deep battlespace the Marine Corps needs an organization that can train, man, equip, employ, and concentrate the reconnaissance and collection community while providing focus and interoperability across its individual components to dominate the future counter-reconnaissance fight. The implementation of a Reconnaissance Regiment reporting directly to the Marine Expeditionary Force would fill the majority of the intelligence and reconnaissance gaps that were identified by General Gray in 1989 and provide the ability of the reconnaissance community to adapt to the future operating environment.³⁰ The Marine Operating Concept (MOC) identifies the need for both increased capacity for intelligence and a faster collection to strike capability. The MOC writes, “We must acquire the offensive capabilities to raise and detect enemy signatures across the spectrum, quickly and accurately assign meaning to what we observe, and rapidly take action to exploit any opportunity.”³¹ Current structure was unable to meet the new threat environment in two separate wargames, Exercise MAGTF Warrior 2025 and the Marine Corps Warfighting Lab’s Counter Reconnaissance Wargame.³² The reconnaissance assets reporting to MEF did not have any influence to affect the enemy in the deep fight and the reconnaissance assets working for the MEF Ground Combat Element in the Division could not provide the time and space to react to enemy

actions and prevent enemy collection of composition and disposition of friendly forces. A Reconnaissance Regiment working directly for the MEF would provide the ability to queue off deep collection assets and actively fight for information while providing the depth needed in the future operating environment. While the MEF Information Group (MIG) provides increased capacity for passive information collection and intelligence production, it does not provide the necessary ability to fight and operate utilizing fire and maneuver to actively generate combat information and exploit that information once identified. The concept of “Operate to Know” requires a new organization that can bring together all reconnaissance and collection assets to bear to either identify information requirements or prevent the enemy from collecting on friendly forces prior to their targeting cycle.³³ The Reconnaissance Regiment working directly for the MEF provides injects into the security area from sensing to agitation in order to force the enemy to create new signatures and identification of enemy units, allowing the collection and targeting cycle to become more effective. This new organization would embody the “Operate to Know” concept through “the collection of enemy information elicited by agitation by massing and layering sensors” combined with information collected from the MIG to identify the enemy network.³⁴

In the future environment, anti-access and area denial (A2AD) will not refer to new capabilities in anti-ship missiles and anti-air systems but is a network of long range weapon systems with sensors and communications to complete the sensor to strike capability.³⁵ This environment will require a significant collection effort to identify sensors, strike assets, and the communication network that provides control. Even if passive systems were able to identify targets, a task organized reconnaissance force will be required to destroy, suppress, or overload those sensors or network to enable either air or naval forces to destroy long range strike platforms. Once the long-range threat is neutralized, conventional forces and combined arms will be able to

be employed to close with the enemy. The United States Army is similarly exploring the feasibility of this same concept with the creation of a Multi-Domain Task Force, a structure that it is composing from a newly created headquarters and brand new structure.³⁶ With the implementation of a Reconnaissance Regiment, a task organized unit, that brings all assets and technologies to bear against the enemy with direct tie into the MIG would easily accomplish this new mission set, creating synergy with all collections and reconnaissance units under one organization to provide direction and unity of effort. This force could access the MIG for cyber and non-kinetic fires to degrade the network, use the firepower of the LAR Battalion, or proximity of Force Reconnaissance Marines to destroy the sensors without risking National level assets in pre-Phase 0 operations.

CONSTRUCTING THE RECONNAISSANCE REGIMENT

To build this new organization, the Marine Corps would establish a Regimental Headquarters able to command and control the subordinate units under its charge and provide basic mobility, life support, and administrative responsibilities as required. The majority of the restructuring would come from aligning subordinate command elements under the Reconnaissance Regiment in the MEF structure. The Reconnaissance Battalions and Light Armored Reconnaissance Battalions would be moved from the Division to fall under the Reconnaissance Regiment. Elements of subordinate units to the new MIG construct would also reorganize to fall under the Reconnaissance Regiment, including the Sensor Control and Management Platoon (SCAMP) from Intelligence Battalion, the Signal Intelligence Support Units (SSUs) from Radio Battalion, the Radio Reconnaissance Teams from Radio Battalion, the Mobile Electronic Warfare Support Systems (MEWSS) from Radio Battalion, and Air Naval Gunfire Liaison Company (ANGLICO). In order for this organization to be truly multi-dimensional, enablers will have to be

staffed to include interface with both the MIG to utilize open source information, cyber non-kinetic fires, and information operations, and enablers from Marine Unmanned Ariel Vehicle Squadron (VMU) to access the full potential of visual and signature collections. The Reconnaissance Regiment will also require planners from both the Combat Engineers for mobility/counter-mobility operations, Aviation Combat Element and the Logistics Combat Element to plan and interface sustainment and supporting arms with task organized reconnaissance and collection forces.

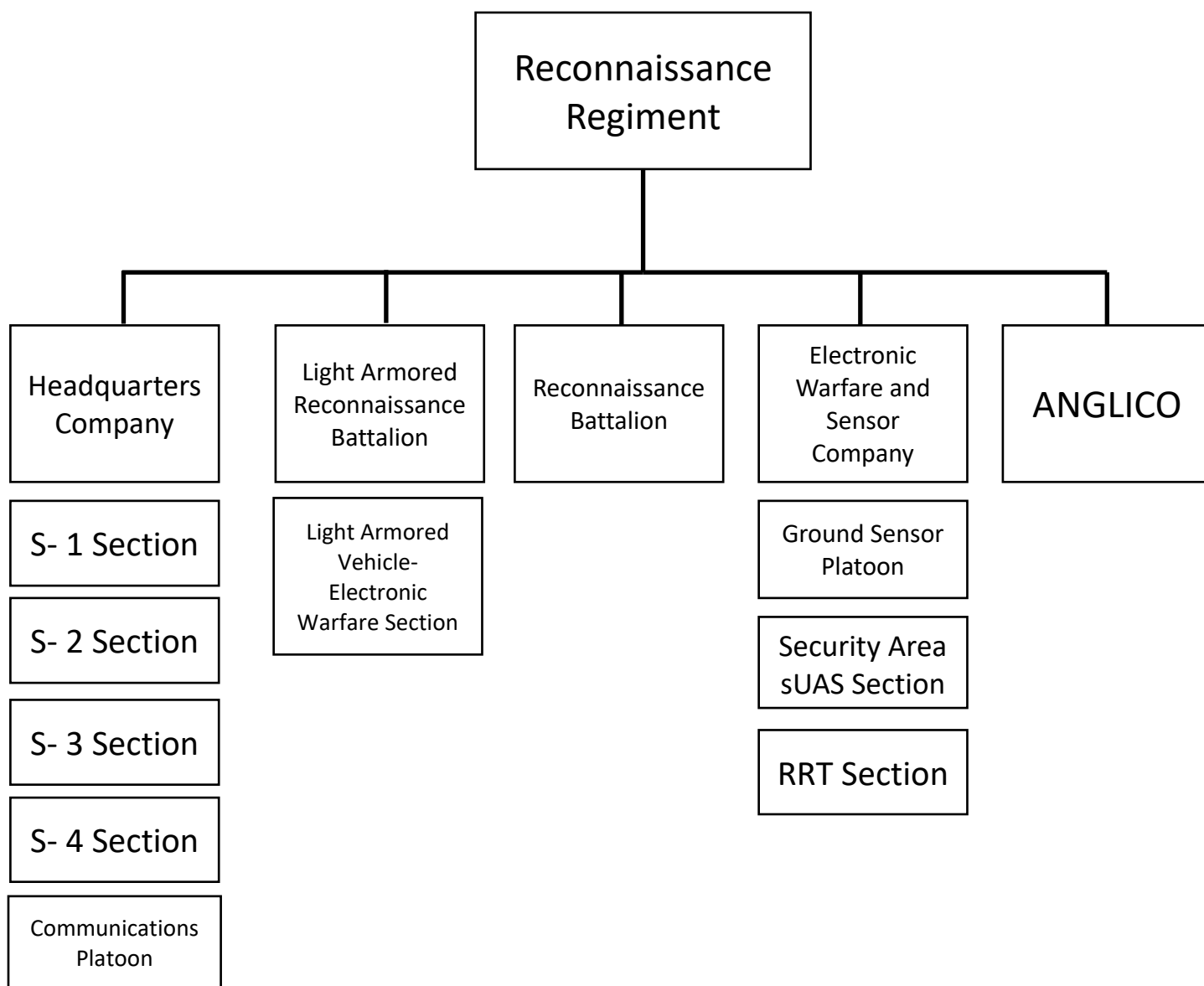


Figure 2. Proposed Table of Organization for the Reconnaissance Regiment

RECONNAISSANCE REGIMENT IN GARRISON

In garrison, the Reconnaissance Regiment would provide unity of effort, training and ensure interoperability among its subordinate commands. By providing oversight to the training, manning, and equipping of subordinate commands, it would gain efficiencies in acquisition, testing, and fielding of new equipment, training packages, and field events while ensuring that all units are nested under the MEF's reconnaissance and security priorities. Though the organization would fall under the MEF, the support provided to the Divisions would remain unchanged while the quality and competency of the units provided would be greatly increased. Division would request reconnaissance and collection assets through MEF and be provided with task organized units consisting of ground, light armored, and electronic warfare collections as required while still meeting MEFs needs including Marine Expeditionary Unit (MEU) requirements. This would standardize the composition and disposition of collection and reconnaissance units that are forward deployed with MEUs and align deployments directly with MEF priorities. This structure would support the consolidation and management of the Reconnaissance Community training starting with the Ground Reconnaissance Military Occupational Specialty, and then additional courses to train Amphibious Reconnaissance Marines and Electronic Warfare Reconnaissance Marines. The Regiment would include all elements of the Deep and Close Security Area to include Reconnaissance Battalion, and Light Armored Reconnaissance Battalion, elements from the MIG to include Radio Battalion, Intelligence Battalion, Air Naval Gunfire Liaison Company (ANGLICO), and Ground Sensor Platoon, as well as a small administration and communication section. This organization would design common systems, tactics techniques and procedures, and

interoperability, providing flexible units that retained capacity when task organized and can operate at any level.

RECONNAISSANCE REGIMENT RANGE OF MILITARY OPERATIONS

Across the ROMO, the Reconnaissance Regiment is assigned the Security Area Battlespace and tasks collection and maneuver assets as required by the MEF and Division intelligence requirements, as the action arm of the MEF Information Group. As the tactical situation develops, the Reconnaissance Regiment provides changes to task organization, mission, and executes dynamic re-tasking to meet the demands as they emerge while providing the eyes and ears to the Division in its deep battlespace. The Reconnaissance Regiment combines the collection and collaboration that occurred within the SARCC and various other boards with the tasking that would normally come from Division G3 Operations after their situational awareness is established. This shift in command and control will allow the Security Area Commander the ability to create a unity of effort in the collections process while shifting forces seamlessly from providing reconnaissance on intelligence requirements to counter-reconnaissance, preventing the enemy from targeting friendly forces as required. This level of synchronization and responsiveness would not be possible utilizing a current collections and reconnaissance construct. With a clear line of reporting, tasking, and command and control, the loss of importance or relevance of a report from any reconnaissance and collections assets would be averted. Regardless of stage, phase, or overwhelming operational situation such as a Main Effort Assault or contested landing/breach, all critical information that requires shaping or action from the MEF for Major Subordinate Elements to be successful would be reported, analyzed, prioritized, and tasked as required due to the elevated situational awareness provided directly to the MEF Commander and his or her new MIG staff.

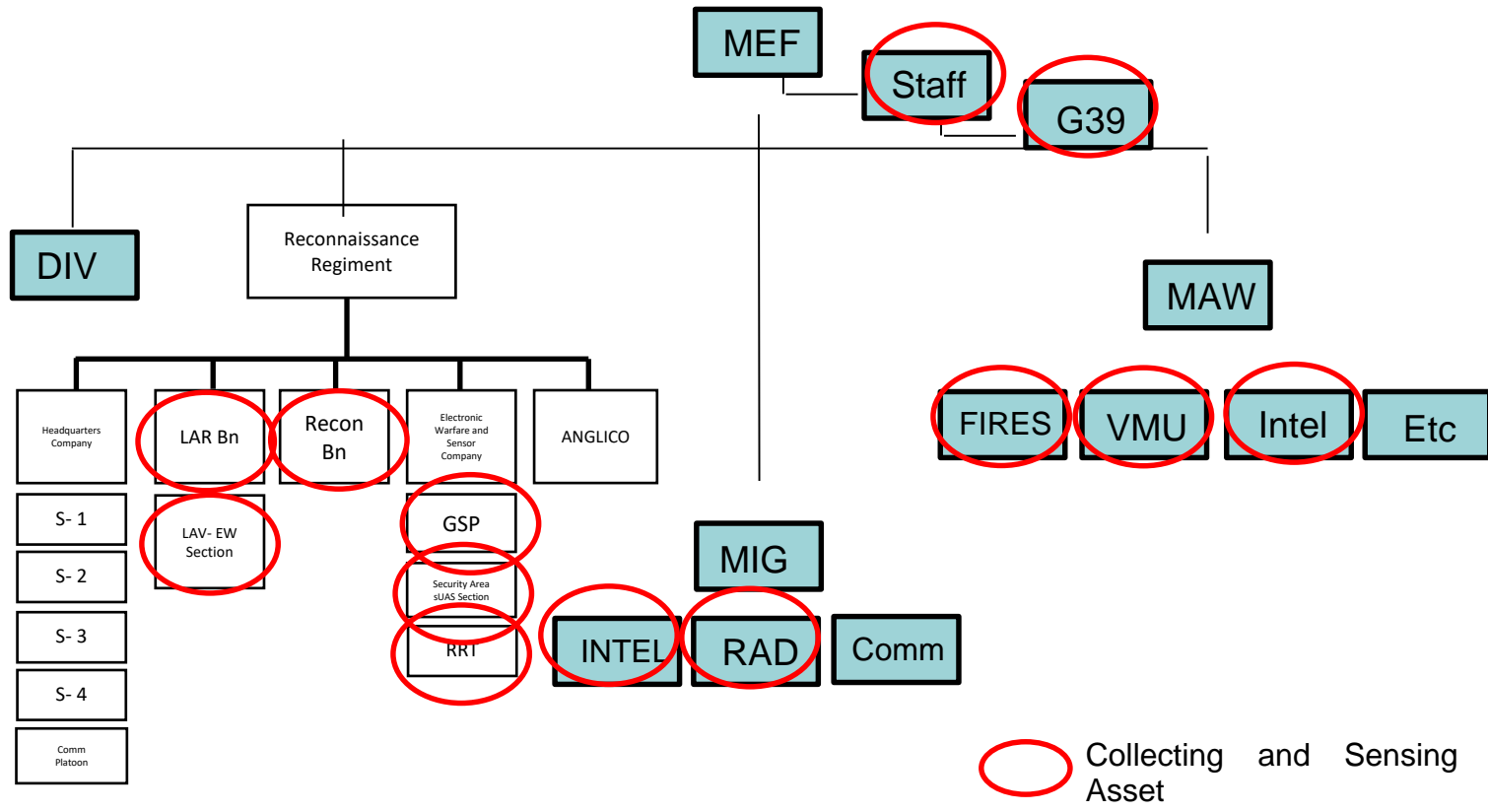


Figure 3. Proposed MEF Collection and Sensing Table of Organization

RECONNAISSANCE REGIMENT IN PLANNING

During the planning process, collections and counter reconnaissance would not be limited by the ability of the Ground Combat Elements ability to command and control those units, but would be designed based off the needs of the mission. To properly employ these new task-organized units, the Joint Community would require a re-interpretation of the traditional Joint Phases on operations. In Joint Doctrine the traditional phase of operation for collection and reconnaissance occurs between Deter and Seizing the Initiative, which is denoted by joint shaping of the

environment that typically involves the insertion of reconnaissance assets, and shaping/reduction of targets through air and long-range surface fires to prepare for conventional operations.³⁷ In previous operations such as Operation DESERT STORM, the enemy was uniformed and able to be readily identified, targeted, and eliminated prior to the start of ground operations. In the future environment, Anti-Access/Area Denial weapon systems and extended sensors will prevent air and naval forces from closing the distance to enable operations during Phase III Seize the Initiative. These operations will require a task organized force to insert, reconnoiter across all domains, and identify enemy targets for destruction through supporting arms or fire and maneuver to enable the transition to Seizing the Initiative. This action will include multi-domain merging of new technology, cyber and traditional fires, and conventional reconnaissance to conduct a new phase of operations, Phase III Enabling Operations. In previous planning efforts, the assets available to support new enabling operations would be tasked through various agencies and be unable to complete the mission due to lack of convergence of mission sets and multiple chains of command. Utilizing the Reconnaissance Regiment in the deliberate planning process, MEF would identify shaping conditions to enable conventional operations without change but would also identify the conditions that must be met to allow lethal and non-lethal force overmatch in shaping the enemy forces. All assets would then be coordinated between the Reconnaissance Regiment and the MIG to design effects and plan for future collections based off of the results of task organized forces enabling identification and destruction of newly identified priority targets. The remaining intelligence requirements and development of the MEF collections plan would be unchanged aside from coordinating with the Regiment to request capacity for reconnaissance assets and effects.

JOINT AND COMBINED INTEROPERABILITY

One major benefit to the adaption of the Reconnaissance Regiment is the benefit to create greater joint interoperability with both the United States Army and the British military forces. The United States Army has identified the need for future force that is able to conduct operations in Anti-Access/Area Denial environments. The Army designed and established a Multi-Domain Task Force incorporating reconnaissance, mobility, conventional fires, cyber, and information operations in small task organized units to be successful in future battles.³⁸ The United Kingdom conducted a future assessment of the operating environment, realized it was not task organized for mission success, and developed a similar solution. The British Army designed a strategy to modernize their forces for 2020 to optimize intelligence, surveillance, and reconnaissance to include electronic warfare and signals intelligence with new technologies. In September of 2014, the British Army stood up the United Kingdom Intelligence, Surveillance, and Reconnaissance Brigade under the Force Troops Command. This force was designed from failures of responsiveness and unity of effort that the British Army experienced from fighting in Afghanistan.³⁹ Currently both groups have not been deployed to combat zones but have participated in numerous training exercises. The establishment of the Reconnaissance Regiment will ensure that the Marine Corps will be able to seamlessly work alongside coalition and sister services in the joint and combined environment in the future.

ORGANIZATIONAL HURDLES FOR THE RECONNAISSANCE REGIMENT

Though the future operating environment requires the creation of a Reconnaissance Regiment, there are organizational hurdles in addition to the previous listed benefits that need overcoming to implement this change. The first and most apparent would be restructuring elements of the MEF and Division to form a cohesive unit from multiple units and sections. This

may cause a short-term decline in performance, readiness, and interoperability. By standing up a regiment to replace the ad hoc organization that currently exists, a new table of organization and equipment will need to be designed and staffed. Many of these billets could be filled from the existing structure from the units that typically supported the SARCC. While negligible in a deployed environment when the SARCC was stood up, the impact of this Table of Organization and Equipment (TO&E) would be felt in garrison across all units unless additional structure is created. Other billets do not currently exist in the current MEF construct and would need to be created, such as the Regimental Commander and key individuals in the proposed staff design. The largest challenge that would need to be addressed would be the changes to doctrine to properly train, employ, and coordinate with the Reconnaissance Regiment. These changes would cover the MCISRE, the Light Armored Reconnaissance, Ground Reconnaissance, and Intelligence guiding publications, as well as adjustment of minor sections of many other supporting publications. Prior to the establishment of the organization or any doctrinal changes, a clear focus, mission, and intent must be designed and implemented across the reconnaissance and collection community to avoid confusion. Without this focus guiding the rest of the documents, the Reconnaissance Regiment's organization would only be as effective as the SRIG when first deployed to Operation DESERT SHEILD, the MEF Headquarters Group when deployed to Operation Iraqi Freedom, and the MIG during the limited exercises since its conception.⁴⁰ While there are many benefits to this recommendation, individual communities have been given the great authority to man, train, and equip their units and may, therefore, potentially push back against the organization due to the parochial nature of their mission sets. Lastly, there will be a large cost to relocating the sensitive material storage facilities from Intelligence Battalion and Radio Battalion to either the Regimental Unit or its subordinate units that would absorb them.

COUNTER ARGUMENTS- TAKING THE OPPOSING VIEW

With any new Marine Corps proposal of structure, employment, and doctrine, there will always be dissenting arguments and opinions to the contrary. Some of the major objections that have been envisioned are listed below with counter points that ultimately show the overarching benefit to the Marine Corps of this new organization. Even with opposing views, by adopting this new structure, the benefit to the organization even greatly outweighs the risks to the force and lack of timely and responsive information and intelligence in the disparate collection assets if no changes are made.

HUSBANDING OF RESOURCES

One argument against the formation of the Reconnaissance Regiment is that it goes against the tenets of a higher headquarters. A MEF level command is charged with balancing the need to keep resources for higher tasking with resourcing Major Subordinate Elements (MSE) they require for mission accomplishment. At a glance the establishment of the Reconnaissance Regiment strips away all reconnaissance and collection assets from the MEF's Ground Combat Element and husbands them at the MEF level: leveling the Division to fight without answering critical information requirements. However, by consolidating the assets under one command under the MEF, the Reconnaissance Regiment is not prevented from providing task organized forces to elements of the Division as required, but also limits the number of units required to request multi-domain collections as they can coordinate with one unit instead of potentially up to five units. With the units consolidated under a single command, the MEF can not only task organize for missions as required, but also mass reconnaissance and collections assets for critical tasks or phases of operations. This design is no different than the consolidation of anti-tank assets removed

from battalions to infantry regiments to allow the mass fires against armor and light armor threats as operationally dictated and is consistent with the 2018 National Security Strategy.⁴¹

DECOMPOSITION OF THE CURRENT MIG STRUCTURE

Another argument that could be made against the Reconnaissance Regiment is that this new structure would pull assets not only from across the MEF and Division, but also from the newly forming MEF Information Group structure before that unit's effectiveness has been tested. While the establishment of the Reconnaissance Regiment would pull assets from the MIG, none of the assets actually deploy or operate as part of the MIG. Upon establishment of the MIG, a number of units fell under their purview not because of the mission statement or enabling ability, but because they originally fell under the MEF Headquarters Group, the predecessor to the MIG. While the timing for restructuring seems like it is ill-conceived, it becomes much more difficult to reorganize for future operations after the command relationships and mission statements are firmly established. Lastly, the sections removed from Intelligence Battalion and Radio Battalion deploy with and require reconnaissance units to operate, maneuver, and deploy in all combat situations outside of MOOTW. This reorganization would be more difficult to manage in garrison but would enhance the interoperability and effectiveness of the employment and survivability of task organized forces with these enablers attached.

TRADING A PROVEN SYSTEM OF COLLECTION FOR AN UNPROVEN CONCEPT

With any new concept or organization there is a risk of trading an effective organization and process for an unproven concept. While our reconnaissance and collection process has enabled the success of the Marine Corps from Desert Shield to current operations in Iraq and Afghanistan, it has been degrading for years as new collections assets and methods come on line, not to mention the expansion of MUU-T and electronic warfare directed by the MOC. The Marine Corps has

relied upon a concept of synergistic coordination, fusion cells, and joint boards to create a common operational picture of the deep area. As new technologies became operational, the Marine Corps identified the cost-effective way to house Top Secret Sensitive Compartmentalized Information (TS-SCI) programs under a common Sensitive Compartmented Information Facility (SCIF), regardless of operational employment or common equipment and training requirements. These organizational and employment considerations define the collection and reconnaissance process and reporting pathways that exist today. The new organization will streamline the tasking and reporting pathways to match the emerging threat environment, not the path of least resistance. Like any other equipment or system, the Marine Corps cannot wait for the existing reconnaissance and collection system to fail. The Marine Corps must look at the future employment of the entire reconnaissance and collection community and ensure that they can continue to provide a common operational picture and provide critical information requirements in all contested domains.

CONCLUSION

In the MOC, the Marine Corps identified the new threat environment dominated by Anti-access/Area Denial weapon systems and the proliferation of sensors and technology and provided broad guidance to evolve the force to meet emerging requirements. This new environment changes the employment and technological advantages that the Marine Corps has enjoyed and challenges the Marine Corps' ability to create lethal overmatch in the future. While the Marine Corps identified the environment, it failed to fully understand the extent of change required to be successful. Other organizations have been created in the past and are currently being organized to synchronize collection efforts and information but have never had the ability to task organize as the situation develops or agitate the situation to develop essential information requirements. These organizations continue to lack the ability to ensure proper priority of intelligence depending at

which level they are supporting. For example, if a Light Armored Reconnaissance Battalion is attached to a Regiment as opposed to working for the Division, the gravity and weight of an intelligence report changes depending on the command relationship. Past efforts remain passive in the nature of collection and rely on coordination to create unity of effort instead of the ability to dynamically task to meet the emerging environment. These systemic issues are currently not addressed by the Marine Corps and will become exacerbated in the future operating environment. The creation of a Reconnaissance Regiment that succeeds in managing and tasking the Marine Corps' reconnaissance and collection assets to support the Marine Air Ground Task Force (MAGTF) in managing battlefield information dominance requirements is necessary to win the counter reconnaissance fight and set the conditions for decisive actions across the range of military operations. Unless the Marine Corps correctly identifies the issue and focuses reconnaissance and collection assets under unity of effort and command, the forces will continue to fail to meet the requirement of quicker dissemination and action to out-cycle emerging threats.

NOTES

¹ United States Army, *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040 Version 1.0* Draft, Headquarters, Department of the Army: Washington, D.C., October 2017. pp 5

² Gray, Alfred M., Gen USMC, *Commandant of the Marine Corps White Letter No. 01-91* dated 26 Jun 1991, Alfred M. Grey Collection A-7-C-5-3 Folder 14, Archives and Special Collections Branch, Library of the Marine Corps, Quantico, VA.

³ Cukor, Drew, LtCol USMC, Jones, Matthew L, Col USMC, Kratzerm Kevin, Capt USMC, Poggmeyer, Sy, 2ndLt USMC, “*Operate to Know: A proposed operating concept for intelligence and operations to enhance combat effectiveness,*” Marine Corps Gazette, Marine Corps Association and Foundation Publication, April 2014. pp 59-61

⁴ Gray, Alfred M. Gen USMC, *Commandant of the Marine Corps White Letter No. 01-91* dated 26 Jun 1991, Alfred M. Grey Collection A-7-C-5-3 Folder 14, Archives and Special Collections Branch, Library of the Marine Corps, Quantico, VA.

⁵ United States Marine Corps, *Command Chronology 1 July – 31 December 1988*, 2D Surveillance Reconnaissance and Intelligence Group, II Marine Expeditionary Force, Marine Corps Records, Quantico, VA, 20 January 1989.

⁶ Anderson, Jon R., “*Intel Battalions a dream likely to come true: SRIGs may be eliminated to provide manpower for new units,*” Navy Times, March 17, 1997.

⁷ Grey, Alfred, Commandant of the Marine Corps, “*Planning the Marine Corps Force Structure*” Report to Brigadier General Charles C. Krulack, USMC, dated 15 Aug 1991, Alfred M. Grey Collection A-7-C-5-3 Folder 14. Archives and Special Collections Branch, Library of the Marine Corps, Quantico, VA.

⁸ United States Marine Corps, *Command Chronology and Lineage of 2D Surveillance, Reconnaissance, Intelligence Group*, Marine Corps Records, Quantico, VA, October 13, 1993.

⁹ Gray, Alfred M. Gen USMC, *Commandant of the Marine Corps White Letter No. 01-91*. "C412 Concept", dated 26 Jun 1991, Alfred M. Grey Collection A-7-C-5-3 Folder 14, Archives and Special Collections Branch, Library of the Marine Corps, Quantico, VA.

¹⁰ Grey, Alfred. Commandant of the Marine Corps, “*Planning the Marine Corps Force Structure*” Report to Brigadier General Charles C. Krulack, USMC, Dated 15 Aug 1991, Alfred M. Grey Collection A-7-C-5-3 Folder 14. Archives and Special Collections Branch, Library of the Marine Corps, Quantico, VA.

¹¹ United States Marine Corps, *Official Lineage of I Marine Expeditionary Force Headquarters Groups*, Marine Corps Records, Quantico, VA, July 2, 2004.

¹² United States Marine Corps, *Official History of 3D Surveillance Reconnaissance Intelligence Group from 1 October 1988 to 5 June 1998*, Marine Corps Records. Quantico, VA, October 1999.

¹³ United States Marine Corps, *Marine Air Ground Task Force Information Environment Operations Concept of Employment*, Marine Corps Concept Development, Quantico, VA, 6 Jul 2017.

¹⁴ United States Marine Corps, *Marine Air Ground Task Force Information Environment Operations Concept of Employment*, Marine Corps Concept Development, Quantico, VA, 6 Jul 2017. pp 4

-
- ¹⁵ Cukor, Drew, LtCol USMC, Jones, Matthew L, Col USMC, Kratzerm Kevin, Capt USMC, Poggmeyer, Sy, 2ndLt USMC, “*Operate to Know: A proposed operating concept for intelligence and operations to enhance combat effectiveness*,” *Marine Corps Gazette*, Marine Corps Association and Foundation Publication, April 2014. pp 58-59
- ¹⁶ United States Marine Corps, *MCWP 2-25 Ground Reconnaissance Operations*, Headquarters, Department of the Marine Corps, Washington, D.C., 25 Nov 2015.
- ¹⁷ United States Marine Corps, *MCWP 2-25 Ground Reconnaissance Operations*, Headquarters, Department of the Marine Corps, Washington, D.C., 25 Nov 2015. pp 3 -21
- ¹⁸ United States Marine Corps, *MCWP 2-25 Ground Reconnaissance Operations*, Headquarters, Department of the Marine Corps, Washington, D.C., 25 Nov 2015. pp 6-18
- ¹⁹ Hennessy, John J., “*Return to Bull Run: The Campaign and Battle of Second Manassas*,” University of Oklahoma Press, New York, NY 1993. pp 98-105
- ²⁰ United States Marine Corps, *Counter Recon Wargame Report Draft*, Marine Corps Warfighting Laboratory, Quantico, VA, June 28 2017.
- ²¹ Sward, Thomas. LtCol USMC and Tyrrell Jr, Tommy L. LtCol USMC, “*Marine Light Armor and Deep Maneuver*” *Marine Corps Gazette*, Marine Corps Association and Foundation Publication, December 1997. pp 16-20
- ²² Nakonieczny, Michael R. LtCol USMC, Personal interview, 15 January 2018.
- ²³ Headquarters United States Marine Corps, *Marine Corps Operating Concept How an Expeditionary Force Operates in the 21st Century*, MOC, September 2016, accessed August 23, 2017. <http://www.mccdc.marines.mil/MOC/>.
- ²⁴ United States Marine Corps, *Counter Recon Wargame Report Draft*, Marine Corps Warfighting Laboratory, Quantico, VA, June 28 2017.
- ²⁵ United States Marine Corps, *MCWP 2-25 Ground Reconnaissance Operations*, Headquarters, Department of the Marine Corps, Washington, D.C., 25 Nov 2015. pp 3-5 – 3-8
- ²⁶ United States Army, *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040 Version 1.0 Draft*, Headquarters, Department of the Army: Washington, D.C., October 2017.
- ²⁷ United States Army, *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040 Version 1.0 Draft*, Headquarters, Department of the Army: Washington, D.C., October 2017. pp 3-4
- ²⁸ United States Marine Corps, *Marine Corps Intelligence, Reconnaissance, Surveillance Enterprise Plan 2015-2020*, Headquarters, Department of the Marine Corps, Washington, D.C., 25 Nov 2015.
- ²⁹ Cukor, Drew, LtCol USMC, Jones, Matthew L, Col USMC, Kratzerm Kevin, Capt USMC, Poggmeyer, Sy, 2ndLt USMC, “*Operate to Know: A proposed operating concept for intelligence and operations to enhance combat effectiveness*,” *Marine Corps Gazette*, Marine Corps Association and Foundation Publication, April 2014. pp 60
- ³⁰ Gray, Alfred M. Gen USMC, *Commandant of the Marine Corps White Letter No. 01-91. "C412 Concept*,” date 26 Jun 1991, Alfred M. Grey Collection A-7-C-5-3 Folder 14, Archives and Special Collections Branch, Library of the Marine Corps, Quantico, VA.
- ³¹ Headquarters United States Marine Corps, *Marine Corps Operating Concept How an Expeditionary Force Operates in the 21st Century*, MOC, September 2016, accessed August 23, 2017. <http://www.mccdc.marines.mil/MOC/>.
- ³² United States Marine Corps, *Counter Recon Wargame Report Draft*, Marine Corps Warfighting Laboratory, Quantico, VA, June 28 2017.

³³ Cukor, Drew, LtCol USMC, Jones, Matthew L, Col USMC, Kratzerm Kevin, Capt USMC, Poggmeyer, Sy, 2ndLt USMC, “*Operate to Know: A proposed operating concept for intelligence and operations to enhance combat effectiveness,*” *Marine Corps Gazette*, Marine Corps Association and Foundation Publication, April 2014.

³⁴ Cukor, Drew, LtCol USMC, Jones, Matthew L, Col USMC, Kratzerm Kevin, Capt USMC, Poggmeyer, Sy, 2ndLt USMC, “*Operate to Know: A proposed operating concept for intelligence and operations to enhance combat effectiveness,*” *Marine Corps Gazette*, Marine Corps Association and Foundation Publication, April 2014.

³⁵ Milley, Mark A., 39th Chief of Staff, USA. Lecture: “*Future Operating Environment.*” Command and Staff College, Marine Corps University, Quantico, VA, January 17, 2018.

³⁶ Milley, Mark A., 39th Chief of Staff, USA. Lecture: “*Future Operating Environment.*” Command and Staff College, Marine Corps University, Quantico, VA, January 17, 2018.

³⁷ US Department of Defense, *Joint Publication 3-0 Joint Operations*, Washington D.C., August 11, 2011. pp IV-28

³⁸ United States Army, *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040 Version 1.0 Draft*, Headquarters, Department of the Army: Washington, D.C., October 2017. pp 3-4

³⁹ United Kingdom Department of Defense, United Kingdom Intelligence, Surveillance, and Reconnaissance Brigade unit, Website accessed December 12, 2017.

<http://www.army.mod.uk/structure/40529.aspx>

⁴⁰ Grey, Alfred, Commandant of the Marine Corps. “*Planning the Marine Corps Force Structure*” Report to Brigadier General Charles C. Krulack, USMC. Dated 15 Aug 1991, Alfred M. Grey Collection A-7-C-5-3 Folder 14. Archives and Special Collections Branch, Library of the Marine Corps, Quantico, VA.

⁴¹ US Department of Defense, Summary of the National Security Strategy 2018, Washington D.C., Accessed 13 February 2018. <https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>. pp 6-9

BIBLIOGRAPHY

- Anderson, Jon R., “*Intel Battalions a dream likely to come true: SRIGs may be eliminated to provide manpower for new units,*” *Navy Times*, March 17, 1997.
- Cukor, Drew, LtCol USMC, Jones, Matthew L., Col USMC, Kratzerm, Kevin, Capt USMC, Poggmeyer, Sy, 2ndLt USMC, “*Operate to Know: A proposed operating concept for intelligence and operations to enhance combat effectiveness,*” *Marine Corps Gazette*, Marine Corps Association and Foundation Publication, April 2014.
- Gray, Alfred M., *Alfred M. Gray Collection*. Library of the Marine Corps, Quantico, VA
- Hennessy, John J., “*Return to Bull Run: The Campaign and Battle of Second Manassas,*” University of Oklahoma Press, New York, NY 1993.
- Milley, Mark A., Gen 39th Chief of Staff, US Army, Lecture: “*Future Operating Environment,*” Command and Staff College, Marine Corps University, Quantico, VA., January 17, 2018.
- Nakonieczny, Michael R., LtCol USMC, Personal interview, 15 January 2018.
- Sward, Thomas. LtCol USMC and Tyrrell Jr., Tommy L., LtCol USMC, “*Marine Light Armor and Deep Maneuver,*” *Marine Corps Gazette*, Marine Corps Association and Foundation Publication, December 1997.
- United States Army, *Multi-Domain Battle: Evolution of Combined Arms for the 21st Century 2025-2040 Version 1.0*, Draft. Headquarters, Department of the Army: Washington, D.C., October 2017.
- United States Marine Corps, *Command Chronology 1 July – 31 December 1988*, 2D Surveillance Reconnaissance and Intelligence Group, II Marine Expeditionary Force, Marine Corps Records, Quantico, VA, 20 January 1989.
- United States Marine Corps, *Command Chronology and Lineage of 2D Surveillance, Reconnaissance, Intelligence Group*, Marine Corps Records, Quantico, VA, October 13, 1993.
- United States Marine Corps, *Official Lineage of I Marine Expeditionary Force Headquarters Groups*, Marine Corps Records, Quantico, VA, July 2, 2004.
- United States Marine Corps, *Official History of 3D Surveillance Reconnaissance Intelligence Group from 1 October 1988 to 5 June 1998*, Marine Corps Records, Quantico, VA, October 1999.
- United States Marine Corps, *Marine Air Ground Task Force Information Environment Operations Concept of Employment*, Marine Corps Concept Development, Quantico, VA, 6 Jul 2017.

United States Marine Corps, *MCWP 2-25 Ground Reconnaissance Operations*, Headquarters, Department of the Marine Corps, Washington, D.C., 25 Nov 2015.

United States Marine Corps, *Counter Recon Wargame Report Draft*, Marine Corps Warfighting Laboratory, Quantico, VA, June 28 2017.

United States Marine Corps, *Marine Corps Operating Concept How an Expeditionary Force Operates in the 21st Century*, MOC, September 2016, accessed August 23, 2017. <http://www.mccdc.marines.mil/MOC/>.

United States Marine Corps, *Marine Corps Intelligence, Reconnaissance, Surveillance Enterprise Plan 2015-2020*, Headquarters, Department of the Marine Corps, Washington, D.C., 25 Nov 2015.

US Department of Defense, *Joint Publication 3-0 Joint Operations*, Washington D.C., August 11, 2011.

United Kingdom Department of Defense, United Kingdom Intelligence, Surveillance, and Reconnaissance Brigade unit website, Accessed December 12, 2017. <http://www.army.mod.uk/structure/40529.aspx>

US Department of Defense, Summary of the National Security Strategy 2018, Washington D.C., Accessed 13 February 2018. <https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>.