MARSOF 2030

A strategic vision for the future
by Staff, Marine Corps Forces, Special Operations Command

Imperative to Change

> *"Adapt or perish, now as ever, is nature's inexorable imperative."*
> —H. G. Wells

The success Raiders enjoy today is the result of groundbreaking work by those who created MARSOC and the hard-won successes of the organization's first decade. During this same period, adversaries and competitors have made investments and advances to close the gap with the United States and position themselves to blunt or avoid U.S. strengths. The indicators and warnings that we face more capable opponents are visible now. We must adapt to meet the associated challenges to come.

The evolution of warfare is a long history of technological, social, economic, and political change converging to form the character of conflict. Successful militaries recognize and embrace these changes, while those that do not risk failure. The future operating environment will challenge MARSOC in the same way that warfare has challenged militaries throughout history. However, the current pace of change is accelerating exponentially. The interplay of technological innovation, global demographic shifts, challenges to the post WWII world order, and the rise of both state and non-state powers portend a future operating environment that is increasingly uncertain, volatile, and complex. The degree to which MARSOC will contribute to our nation's future defense will depend on its ability to recognize and adapt to the challenges of the future operating environment.

MARSOC logo.

A Legacy of Innovation

Our Marine heritage is one of embracing concepts to advance the art of warfighting. The Culebra Island amphibious operations experiments which forged the concepts critical to successful landings in WW II and our pioneering embrace of the experimental helicopter in the Korean War are but two examples. The determination to make long range, tiltrotor aviation a reality is another case that illustrates the Marine tradition of embracing concepts early and using them to create an operational advantage.

At the same time, special operations forces also have a well-established history of innovation. The very reason for SOF's existence has been to provide a capability not resident in the conventional forces. Generally, tactics and equipment used successfully by SOF transition to the broader force, ultimately making the whole of the force more capable. Looking back at our own historical experience as Marines, we see examples of SOF 'innovation' migrating to conventional forces at least as far back as the Interwar period. Our own Evan Carlson developed a 'fire team' concept based on his experience in China in the 1930s that he applied to the Raider battalions and the Marine Corps later adopted for its infantry units in World War II. Concurrently, the entrepreneurial approach of the OSS laid the groundwork for a wide variety of contemporary special operations and activities. Even now, contemporary advances which have made SOF so effective, networked, and lethal are migrating to conventional forces.

This legacy of innovation not only serves us well, it also backstops an imperative to adapt and evolve at a time when our enemies are rapidly closing the technological gaps we have enjoyed over most of our professional lives. To maintain the status quo in the changing environment is to cede advantage to a wide group of threats who are actively seeking (and exploiting) gaps and seams in U.S. military capabilities.

Our effort to prepare for an uncertain future arrives, appropriately, at the point of MARSOC's maturation. After more than a decade of growth, development, and experience, our institutional maturity allows for the opportunity to extend our view beyond near term challenges. SOF's achievements, and its ascendancy as a policy tool for a wide range of national security problems, provides further opportunity to build toward tomorrow's challenges. This will require a sustained effort that continually looks ahead, assesses the challenges of the future environment, and adapts capability to meet those challenges. We must approach change with the flexibility to expand with defense funding coupled with the resourcefulness to achieve change in a competitive fiscal environment.

This window comes at a time when the Command is itself accelerating. MARSOC has now reached a level of

This maturation allows the Command to deepen our understanding and application of core competencies, while adjusting and even expanding our scope to include a broader range of threats.

We will use this advantage to incorporate the lessons of our first decade while aggressively preparing for the next.

maturity where our regimental commanders have led MSOCs, Raider Battalions are led by former team commanders, and many primary staff members have served previously at various levels within the organization.

The Future Operating Environment

Preparing the force for service in a volatile and uncertain future requires a degree of prediction about the drivers of conflict, threats, and the contexts of the environment in which our Raiders will serve. Predictions are inherently risky and imprecise. We fully acknowledge the inexact nature of future projection. Nonetheless, some prediction is required to plan. Our view of the future is grounded in a wide survey of the thinking across the Joint force, the intelligence community, our allies, academia, and nongovernmental business and technology sectors. The prevalence of certain key trends is undeniable, though the exact timing and impact of specific trends within the broader sweep of time may be debatable. Barring a "Black Swan" event, we are confident that our vision accommodates key features and the general context of the future operating environment.

The world is changing rapidly. Failing to adapt to those changes is to condemn our forces to unacceptable risk, as our opponents innovate and new threats surface to challenge the nation. Across a wide range of megatrends, forecasts, and developing technologies, our wargaming and analysis consistently pointed to several key trends. These, in turn, drove conditions in the future operational environment that we can view as either threats or opportunities. This vision outlines the concepts that we will harness to exploit selected opportunities and mitigate threats of concern.

Among the large set of trends that will drive future conflicts, the convergence of two broad themes will likely shape the specific problems against which the United States will employ SOF. These two factors are Regional Competition and Instability.

Regional Competition	Instability
Shifting Strategic Relationships	Connected Consequences of Fragile & Failing States
Powers Pursuing Regional Primacy	Proliferated Information Technologies
Regional Powers Attain Global Reach	Intensifying Consequences of Population Growth & Migration
Significance of Systems & Systems Integration	Alternative Hubs of Authority
Emerging Measure/Countermeasure	Rise of Privatized Violence

Regional competition describes a condition brought about by a number of trends already visible today. Those trends include, but are not limited to, competition as a result of shifting strategic relationships and changes in the relative power of certain countries. In particular, the economic and military rise of China and India, increasing rivalries in the Middle East, and Russia's struggle to remain a world power will fuel competition in an increasingly connected global landscape. In some cases, regional powers will attain global reach by acquiring nuclear or advanced technological armaments; a fact which will challenge U.S. freedom of action and

perhaps diminish its influence with less committed partners. The foundation of current U.S. military strength may be difficult to bring to bear in scenarios where a regional adversary possesses a local advantage that precludes the unilateral application of airpower, ISR, or space-based communications/guidance. In certain key capability areas, competitors may effectively close technological gaps with the U.S. military or use asymmetric strategies to blunt our strengths. This military advance will likely coincide with economic growth that fuels global expansion into areas of traditional U.S. influence and gives rise to sharp, multi-faceted competition short of open military conflict. Regional powers are likely to attempt to challenge the U.S. role in areas they increasingly view as their own. The U.S. response to these revisionist bids will, in many cases, be the employment of SOF to define the problem, achieve ends, and demonstrate resolve without unnecessarily escalating them into open conflict. In either of these scenarios, SOF will buy decision space for senior leaders to observe and orient on the problem.

Meanwhile, more of the globe will find the conditions of daily life increasingly unstable. Explosive population growth in areas of traditionally poor governance and limited resources will fuel instability across entire regions. This will, in turn, increase the emerging patterns of migration, destabilizing areas perhaps quite removed from the initial crisis source. Much of the migration will be to urban areas and ever growing megacities. These key hubs will become dense, disordered 'knots' of competing power structures. They will comprise

both licit and illicit activity, exert outsized influence on international affairs, and involve overlapping and competing interests for the United States and an array of global and regional actors.

The war of ideas will not be the exclusive domain of nation states. Individuals and groups will rise to prominence to challenge traditional power structures and norms. Both multinational corporations and powerful transportation hubs that straddle air, land, and water routes are likely to seek larger influence as issues bring national interest into friction with their own. As resource disparities increase and personal outlooks for success dim, an increased population of disaffected or marginalized youth, ever more connected by the internet and social media, will be ncreasingly susceptible to virtual and non-state groups promoting radical or destabilizing ideologies.

> *MARSOF* will execute missions set against the context of regional competition and instability. As these two themes collide, however, the complexity of the operating environment will increase dramatically.*

This environment will challenge U.S. policy during the best of times, but with the addition of a regional crisis, a natural disaster, a pandemic, or internal conflict the problem multiplies dramatically. Such circumstances challenge the U.S. government's ability to respond

*MARSOF: Marine Special Operations Forces refers generically to the operational force.

Elements of the Future Operating Environment

Erosion of US military advantage
• *Peers/near peers close technological gaps and find asymmetric offsets; we often fail to understand these asymmetries*

• *The military instrument alone is insufficient to solve the complex problems for which it will be used*

• *Signature management severely limits US freedom of action and maneuver*

Multi-polar arenas featuring sharp competition across DIME
• *Other instruments of power, 'contactless action' (Gerasimov model) are employed by adversaries to achieve strategic objectives*

• *Rising powers/non-state actors take advantage of the way in which the US conceptualizes war; adversaries operate below US 'threshold' for force*

Attractiveness of small footprint solutions
• *Mitigating risk while exploiting technological advantages of remote and reach-back capabilities*

Dramatic expansion of global connectedness and interactions
• *Trend toward transregional and multi-domain actions increases and accelerates*

'Tangle' of capabilities spread across agencies/levels limiting responsiveness and efficacy
• *Finding an appropriate and durable solution challenges traditional US 'means' and modes of organization*

Attractiveness of Hybrid and Information Warfare as a tool for adversaries
• *At relatively low cost of entry, the 'Gray Zone' offers our adversaries a means to mitigate traditional US strengths, precisely because it operates below the norms of international response*

Increased complexity and uncertainty in the operating environment
• *Speed of change and action only increases the imperative to understand complex environments and inform decisions*

and make the role of SOF simultaneously more urgent and more difficult.

In such an operational context special operations forces, with continued emphasis on a limited footprint, will find themselves a key participant to any U.S. response. To correctly understand the problem and act meaningfully without unwittingly escalating tensions will entail accepting a certain level of po-

litical risk; a fact that lends weight to the application of SOF in such circumstances. Concurrently, the complexity of a particular situation will likely require a wide range of interagency and allied partners, working together, to understand and solve the underlying problems.

The reality of contemporary and future challenges to the international

system is such that the root causes of the problem are almost invariably non-military—as are the most effective solutions. That said, the military instrument is frequently seen as the most capable tool of national power. Often viewed as the force of choice, SOF is ideally poised to enable the application of other instruments of national power. As conflict moves further into the information and cyber spaces, MARSOF will find themselves leveraging theater, interagency, or national level tools to achieve desired outcomes.

Guiding Concepts

Forces that cannot thrive in chaotic, complex operating environments will find the future to be an unforgiving place. To succeed, organizations will be required to change their modes of thinking about problems, how they see themselves, and their willingness to pursue adaptations.

There are opportunities on the horizon for our organization that are natural extensions of present day strengths. Likewise, with thoughtful, focused effort and a willingness to embrace change, we can develop in ways that mitigate vulnerabilities and threats we expect to face.

The results of our futures analysis provide broad implications for the force as well as options from which MARSOC can shape its future capability to meet the challenges of the future operating environment. Throughout the wargames series, four discrete concepts or 'themes' consistently emerged. Each theme describes a distinct aspect of a vision for MARSOC, but at the same time builds upon the others such that the four are interconnected and mutually supporting. Together they provide a strong conceptual basis for a future MARSOC that evolves with the operating environment to remain a capable
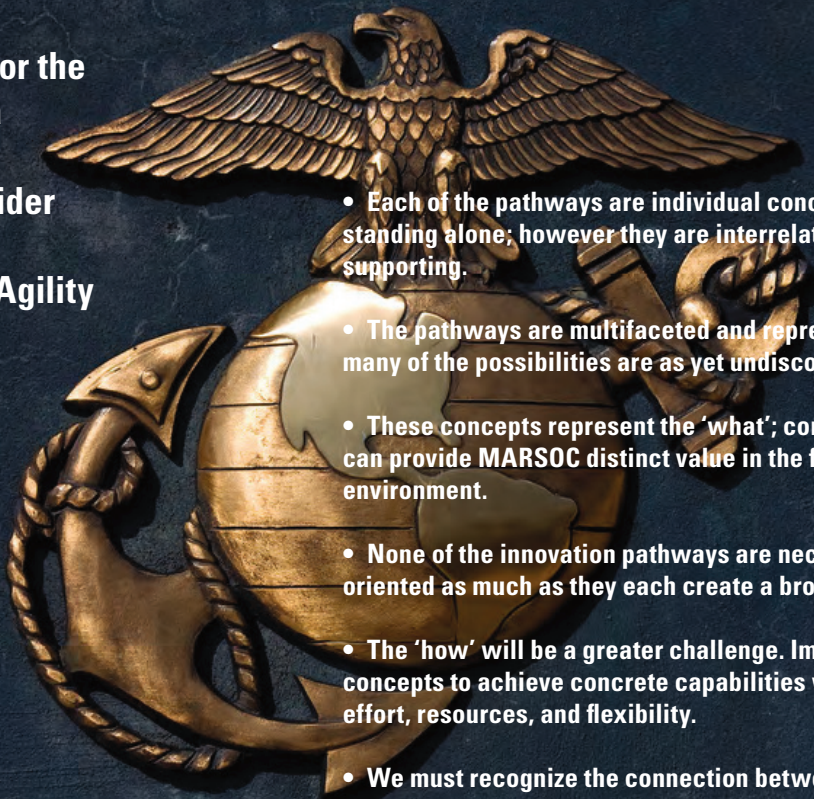
and credible force across warfighting and Title 10 functions. Collectively, these four themes are the core pathways of innovation.

MARSOF As A Connector

Bringing greater and more diverse capabilities to bear on problems

The lines between war and peace will become ever more stretched and blurred as opponents seek to exploit U.S. vulnerabilities and reorder the world to their advantage. SOF will continue to be the premier choice for policy makers seeking to mitigate political risk and avoid direct confrontation while providing a scalable, effective response across a range of problem sets.

To compete in the future operating environment, Raider formations will need to leverage the increasing reach of national and theater level capabilities, particularly those within the in-

MARSOF as a Connector

Combined Arms for the Connected Arena

The Cognitive Raider

Enterprise Level Agility

- Each of the pathways are individual concepts capable of standing alone; however they are interrelated and mutually supporting.

- The pathways are multifaceted and represent a range of ideas; many of the possibilities are as yet undiscovered.

- These concepts represent the 'what'; conceptual visions which can provide MARSOC distinct value in the future operating environment.

- None of the innovation pathways are necessarily 'endstate' oriented as much as they each create a broad field of opportunity.

- The 'how' will be a greater challenge. Implementing these concepts to achieve concrete capabilities will require time, effort, resources, and flexibility.

- We must recognize the connection between these concepts and programmatics. This will require leveraging both USMC and USSOCOM capability development mechanisms.

SOF will be viewed as the tool to organize/coalesce whole of government approaches to difficult, complex problems. (Photo provided by MARSOC.)

formation space. MARSOC's facility in building cohesive, task organized teams provides us the opportunity to develop into the ideal integrator and synchronizer of U.S. global capabilities with USSOF and partner nation actions. This concept aims to extend the idea of integration beyond traditional battlefield functions like ISR, Fires, Information Operations, and Electronic Warfare. MARSOC seeks to leverage its command and control architecture to provide a foundation from which U.S. and coalition actors and capabilities can be brought to bear on problems whose solutions require the synergy of military and non-military instruments.

As competitors and adversaries refine approaches within what we today call 'Hybrid Warfare', the challenges will routinely defy strictly military responses while requiring the expertise of players from across the government. Nonetheless, the nation will continue to gravitate to the Department of Defense. Within the military, SOF will be viewed as the tool to organize/coalesce whole of government approaches to difficult, complex problems. MARSOC's strength in task organizing and integrating across functional capabilities will provide a natural foundation on which to integrate and enhance theater, national, and interagency capabilities at every

echelon. Our emphasis on relationships and mission command naturally positions our forces to be the connector, synchronizer, enabler, and integrator, particularly in cases where interagency or foreign partners possess limited command and control capability. Facility in matching and coordinating military and non-military instruments against multi-faceted, complex problems will provide MARSOC with a truly unique capability to produce valuable operational and strategic level effects in areas that currently stymie DoD.

Integrating tactical, theater, and national capabilities with a relatively small 'boots on the ground' presence, as well as providing a venue for coordinating interagency actions, holds the potential to provide the nation with a unique set of capabilities. This concept comes with significant challenges. It will require an ambitious effort to change current authorities and permissions. It will also require a long term effort to build the interagency relationships, understanding, and trust that must necessarily underpin such a concept. Lastly, it will require investments in select regions to cultivate the required partner relationships above the tactical level.

Although this concept has inherent challenges, it builds on MARSOC's

existing strength in command and control. Raider formations can become preferred partners; the 'glue' that binds wide ranging capabilities and disparate entities to achieve meaningful effects.

Combined Arms for the Connected Arena

Intertwining Information, Intelligence, and Cyber

Populations across the globe are increasingly connected in ways which have more and more meaning with each passing year. These connections will shape features of everyday life in both positive and disruptive ways; bringing rapid development and social change to some regions while bringing turmoil and upheaval to others. To operate in this connected landscape, our Raiders must discard old thinking that compartmentalizes information and cyber as distant supporting efforts to physical operations. A wide range of state, group, and individual actors will be engaged in a continuous tug of war in the information space, while others actively monitor the activity in this domain to inform operations and activities.

The significance of the information environment, to include its physical, virtual, and informational components, is an enduring feature of conflict. Ultimately, the consequences of the information environment relate to how it affects the cognition (perceptions, beliefs, decisions, etc.) of its relevant actors. Our units must be able to thoughtfully combine intelligence, information, and cyber operations to affect opponent decision making, influence diverse audiences, and counter false narratives. Furthermore, we must be able to synchronize operations, activities, and actions in the information environment with those across operational domains and, when necessary, fuse cognitive and lethal effects. Given current trends, effects in the information environment will become increasingly decisive across the conflict continuum.

In the ever more contested and disordered world of tomorrow, a key SOF requirement will be to both 'sense' and 'make sense of' what is happening in diverse and multi-dimensional environ-

ments. Building understanding of these environments across interconnected domains will increase MARSOC's requirements for collection and analysis. Tactical leaders at all levels must better understand intelligence capabilities and applications to achieve a higher level of operations-intelligence integration. This integration will capitalize upon the relationship between special operations and intelligence activities, while the lines between the two increasingly blur.

In this arena of competition that spans the virtual and physical spheres, Raider formations will be the ideal choice to map and understand the 'system' as well as the myriad networks in play. The future operating environment will almost certainly comprise an overlapping array of licit and illicit networks, simultaneous areas of cooperation and conflict among regional actors, and a clash of old and new paradigms. The sharpening tension between traditional groups and individual empowerment will play out in both the digital and physical domains. Understanding this new landscape will be critically important to leadership at every level. To compete within that space MARSOC must have the necessary tools, training, and expertise. The ability to deliberately counter threat narratives and proactively influence diverse audiences will be a critical capability for our units.

Building awareness and acting across the information environment requires deliberate effort that will challenge current roles, missions, and authorities. Where our Raiders identify operational requirements that we lack the ability to fulfill, we must have the means to connect to responsive capabilities from the Joint force or interagency. Raider formations will increasingly operate in the information environment and integrate those operations across physical domains. This demands our units view information and cyber tools as foundational, not just complementary, and develop facility in combining them as naturally as we combine direct and indirect fires today. To achieve this we must change the manning, training, and equipping of our force. The creation of an enhanced combat development capability is one of the more important aspects of achieving MARSOC's goals for the future. Capabilities held at higher levels today may be accessed (with effort) in the near term, routinely incorporated into operations in the mid-term, and perhaps become habitually associated or organic over the long term.

As larger swaths of the world connect to the digital sphere and 'the internet of things' becomes increasingly pervasive,

Raider formations must glean meaning from an exponentially growing set of inputs and ambient 'noise'. Forward deployed Raiders will need the means to reach back to larger processing and analytic resources in order to inform decisions and shape operations. Fully realized intelligence tools will connect tactical, theater, and national collections and databases to enable operational understanding across the human, information, and cyber domains. This understanding will provide the analytical basis for adaptive approaches and actions to achieve precise effects across a range of environments and problem sets.

> *"This demands our units view the tools across information and cyber domains as foundational, not just complementary, and develop facility in combining them as naturally as we combine direct and indirect fires today."*

The Cognitive Raider

Infer, Inform, Influence & Fight; Enhancing Skills for 2030

Sharp regional competition by adversaries with the ability to mitigate or deny traditional U.S. military strengths will increasingly drive missions demanding a high degree of skill and nuance to discern the sources of the problem and develop meaningful solutions. These problems will strain current conceptions of conflict and joint phasing, thus requiring SOF capabilities that can effectively address them while minimizing open hostilities.

The Raiders we send into such environments must be able to understand

Forward deployed Raiders will need the means to reach back to larger processing and analytic resources. (Photo provided by MARSOC.)

their surroundings and then adapt their approaches across an expanded range of solutions. While tough, close-in, violent actions will remain a feature of future warfare, MARSOF must increasingly integrate tactical capabilities and partnered operations with evolving national, theater, and interagency capabilities across all operational domains, to include those of information and cyber.

Creating operational and strategic effects in the future operating environment will require a SOF operator with an equal amount of brain to match brawn; foresight in addition to fortitude. Raiders must be able to seamlessly integrate a wide range of complex tasks; influencing allies and partners; developing an understanding of emerging problems; informing decision makers; applying national, theater, and interagency capabilities to problems; and fighting as adeptly in the information space as the physical. This set of competencies defines the 'Cognitive Raider'

Marine Raider badge. (Photo provided by MARSOC.)

and is necessary to achieve 'MARSOF as a Connector' and 'Combined Arms for the Connected Arena'.

Built upon a solid foundation of continued tactical excellence, the 2030 Raider must be as comfortable working as a part of interagency or multinational effort as serving inside of a MARSOF formation. This concept will place increased emphasis on the qualities of intellect, judgment, creativity, and teamwork while maintaining attributes like determination and endurance that have been critical to our success to date. The Cognitive Raider must have the curiosity and intellect to see the whole picture and infer underlying problems, the skill to convey those layers to leaders, the creativity to recommend effective multi-domain action, and the drive to see those actions through to completion.

Future missions will place our Raiders in increasingly ambiguous and complex environments. There will be a requirement to understand the drivers of conflict, the nuanced interests of all actors and groups, and the cascading ramifications of actions. The average individual's access to information and ability to wield power previously reserved for nation states advances the trend of individual empowerment. Coupled with the increasing influence of non-state and multinational groups, such trends challenge the traditional top-down approach of states and further complicate problem resolution. These trends will heighten the need for individuals who can parse the disparate elements of a problem set and deliver meaningful action.

The 'Cognitive Raider' concept applies to both the individual Raider and the collective cognitive capability of the team. Furthermore, the term refers to the capabilities of every Raider in MARSOC. Future missions will require MARSOC to further capitalize on its collective capability, driving ever closer integration of specialized skills and blurring the distinction between operator and specialist. To implement this concept, MARSOC must be willing to reconsider and challenge existing force composition and structure paradigms. Some specialties may require experience and skills not resident in current billets or ranks. We must be willing to reexamine the full range of 'types and stripes' required across specialties and the degree of SOF specialization within each.

Producing these Raiders will require adjustments in how we recruit, screen, assess, select, and then train our personnel. We must ask ourselves hard questions about each of these areas and be willing to challenge the status quo wherever a policy or process is poorly aligned with the future requirement. The attainment of this goal will require us to reassess the individual attributes we select for and re-evaluate training and education roadmaps to ensure we possess the right mix of Raiders with the right capabilities. To retain and best employ these cognitive Raiders will require thoughtful adaptations to structure, promotion, and career path models.

Though not without challenges, these changes will be necessary to

generate Raiders capable of thriving in the future operating environment. This challenging mix of understanding, influence, and action will come to define MARSOF, and the determination to succeed in high stakes challenges leveraging these attributes will be the embodiment of Spiritus Invictus. These Marines—savvy and adaptable by virtue of their personal attributes, focused training, and additional education—underpin the other concepts which will drive MARSOC into the future.

MARSOC's small size becomes a significant strength. (Photo provided by MARSOC.)

Enterprise Level Agility

MARSOC possesses the advantage of being a relatively small force with its own component headquarters. Our cohesive, focused force confers an organizational agility that allows the Command to rapidly reorient the organization to confront new challenges as they emerge. In other words, the unity of purpose and organizational dexterity over which MARSOC presides provides SOCOM with an agile, adaptable force to meet unexpected or rapidly changing requirements. Seen from the bottom up, forward deployed Raider echelons are able to reach directly back into a responsive component command headquarters to assist in innovating solutions for operational problems. In this context,

MARSOC's small size becomes a significant strength; one that can provide both organizational and operational agility to the USSOCOM Commander.

The results of our wargames are in line with most of the future operating environment assessments that forecast increasing uncertainty, volatility, and complexity. Success will require SOF that is adaptable to changing environments and versatile across a diverse range of challenges. An institutionally agile MARSOC provides USSOCOM with a component that can rapidly orient, focus, or retool capabilities to meet emerging requirements or work a discrete trans-regional problem set with full spectrum SOF from onset through resolution. This tactical adaptability ad operational agility will enable MARSOC to contribute more meaningfully within USSOCOM and be a bid for strategic success against rapidly emerging and changing threats.

In realizing this vision, MARSOC will remain true to its Marine Corps values and warrior ethos, while simultaneously challenging its own organizational culture and service paradigms. Mere declarations of agility will be insufficient to achieve this vision, MARSOC will have to examine processes, assess

emerging requirements, and adapt capabilities across DOTMLPF to achieve a capability that currently resides in only one area of the SOF Enterprise. Unity of purpose and effort, as well as a shared identity as Marine Raiders, provide MARSOC with the institutional resiliency to pursue new constructs and approaches that optimize capability, flexibility, versatility, and adaptability. This new level of agility and adaptability also requires willingness and the processes to critically assess performance, internally identify flaws, and make the necessary corrections. MARSOC may provide singular value to USSOCOM by actively striving to be its most agile, adaptable, and responsive component.

> *"In this context, MAR-SOC's small size becomes a significant strength; one that can provide both organizational and operational agility to the USSOCOM Commander."*

Operational Vignettes

Imagining the concepts in action

West Africa, 2028. Marine SOF is deployed as a part of U.S. support to a struggling host government. The host country is facing increasing unrest as a result of massive migrations to its urban centers and the resultant strain on services. The region has seen uneven economic growth between the Christian tribes that control much of the economy and government and the swelling numbers of migrant, predominantly non-Christian peoples that have moved to the urban areas seeking stability. As the population grew, these cities became the setting for the increased growth of radical groups and large semi-licit criminal enterprises that have tangled interests with a variety of malign networks.

Raider Team House, near the partner military's elite commando base.

"Top, Check this out." An analysis had just come back from stateside that used data analytics to cross reference digital interactions across five popular local social applications and cellular calls with human intelligence the team had gathered. The team had taken the linkages the analysis suggested and crossreferenced the names with the FBI and DEA reps also working out of the American embassy. Master Sergeant Thomason looked over the results. He had sensed that conditions on the ground inside of the country's sprawling capital city were worsening and this paper confirmed that hunch.

Thomason thought about the results and how best to share the relevant data with his interagency partners; he needed to notify them as soon as possible, but the message had to be thoughtfully presented to discourage a potential overreaction. The partnered host nation military leaders also needed access to this information as it will potentially alter some planned combined operations.

The Master Sergeant thought about the many players with whom the team interacted across the unofficial interagency task force and was grateful for the effort that the unit had taken to build trust and shared purpose across the U.S. contingent. He had worked hard to instill in the team that their success was going to be measured by the strength of the connections they could make across the U.S. stakeholders and the host government.

Thomason thought it likely that he would have to speak desk side with both the Chief of Station and the Chief of Mission, as well as senior partner nation military leaders in short order. He was grateful for his experience on MARSOC's first interagency internship program a few years back, not to mention lessons he had learned during several earlier West African deployments. The interagency program, in particular, had given him much greater confidence in these settings; it helped him see things from the perspective of other agencies, navigate their processes, appreciate their culture, and, above all, effectively communicate to their decision makers. He thought about where he and the team would be now had the 0372 Roadmap not placed such emphasis on SOF education and interagency collaboration.

MSOC Operations Center, Triborder area 1,000 miles North

Major Carlson looked at the graphic his intelligence team had prepared of the developing situation. The graphic encompassed MSgt Thomason's location near the capital, the adjacent country, and the area in which the company's

Carlson had made several West African deployments. (Image provided by MARSOC.)

second team was operating. The company had quickly pushed information up to the Theater Special Operations Command and analysts at the company, theater, and national levels were actively collaborating in real time. Carlson's staff then sent portions of the releasable information to allied SOF in a nearby area, who responded with bits of their own intelligence which added to the overall picture.

The MSOC had begun to get a sense of the developing problem in the region. There was a mosaic of overlapping ethnic, religious, political, commercial, criminal, and special interests that was impossibly difficult to sort through. The company had tools and predictive programs to help make sense of this unfamiliar landscape, but the situation was both noisy and fluid with the sheer millions of people involved and the monumental scope of the problems. The partner government would have struggled to address a situation half as complex and was simply overwhelmed by the problem confronting it. The massive migrations to the overburdened urban centers had shifted allegiances and old alliances amongst religious, ethnic, and tribal groups while increased connection to the internet had raised expectations and fostered new grievances while reinvigorating old ones. In this case there were clear indications that a new, if poorly defined, threat group might be forming. It was unclear what set of grievances or stressors might be incentivizing malign actions, but there were clear signals that actors from a variety of previously unrelated threat groups were cooperating and swaths of the populace who had been largely pro-government were increasingly receptive to what appeared to be organized anti-government messages.

Carlson followed his initial actions with detailed requests for intelligence support from both theater and national assets. He had been marginally aware of these capabilities as a young team commander, but the command had pushed aggressively to learn about and integrate them where applicable while he was still a company XO. The dividends were immediate. Over time, processes were gradually streamlined and authorities granted that helped Raiders access powerful cyber tools. They used these to track activities, as well as reach-back analytical resources, to uncover patterns and overlaps between social, financial, and political opposition activity.

The MSOC staff was now able to integrate these tools with enhanced systems and additional capabilities

the command had developed. Carlson now considered the powerful analytical systems that linked his company's inputs with an array of U.S., allied, and open source information as an integral 'member' of the team. The staff might jokingly call the Artificial Intelligence system 'C3PO', but no one could deny that its predictions and analysis had consistently proved correct and led them to a better understanding of an otherwise impregnable problem. In fact, it was 'C3P0' that sensed a shift in social media interactions in a certain slum and noticed communications signaling a heightened sense of tension. The AI had correlated this with patterns in a threat group's communications which led to the prediction that a cell had moved into the slum and was planning an attack. Carlson's Raiders had been able to cue their partnered commandos and accompany them to disrupt the attack and collapse what had been a particularly effective terror cell.

There was concern that the urban sprawl and slums surrounding and crisscrossing the city offered an environment ripe for radicalization by terror groups. Raiders had effectively contained and reduced several prominent terror groups, perhaps so much so that there was a change happening in real time that they were beginning to see. "XO, prep the teams. We need to sketch out some options to get ahead of this problem," the Major said as he picked up the phone to call his boss.

African commando base, three months later

MSgt Thomason shuffled away from the helicopter, turning his head to avoid sand kicked up by the rotor wash. After days of debate and intense planning he and several of his Raiders had accompanied their partner commandos on an operation that had successfully detained a key threat facilitator. The partner unit had performed well, and the operation had gone smoothly despite its location deep within an incredibly dense, chaotic slum teeming with competing factions and leaning anti-government. As the commandos flew into the city, Thomason's Raiders had selectively disrupted communications in and around the target area. This had forced residents

to shift to a temporary government broadcast WiFi bubble that allowed the government to pass key information and counter threat narratives that had begun to gain traction. The Raiders had used a newly developed 'friend or foe' scan which interrogated nearby digital devices and predicted hostile, unknown, or friendly status based upon online activity to tailor their interactions with members of the surrounding crowds during the operation.

As the team flew away from the target site and normal service resumed, a host of tools at the team, company, and theater level began monitoring the cyber realm for the post mission communications in the area. The sheer volume of digital traffic in the dense urban sprawl required reach back in varying degrees to tools and devices at various levels of command. These conversations and interactions would reveal much about the local and international network that was metastasizing into a real threat group.

"You good to go?" Thomason asked his ops chief. He was leading several Raiders who were assisting the commandos in exploiting the detainee's electronic devices and questioning the terrorist facilitator. Thomason accompanied the commando leadership to meet with some interagency partners and host government agency leaders to work out the combined actions the government would take next.

The Marines met with their partners for the rest of the day, balancing the need to act decisively against the emerging threat without giving the group undue credibility and avoiding any unforced errors which would 'pour gas' on the flames it was attempting to fan. American military and partner agency reps were keen to address the many non-military aspects of the problem and promote positive efforts and local voices. Thomason took notes and found several of these lines of effort in which his Raiders could certainly assist. There was clearly a role for his men to support and accompany the commandos on missions against key targets, but he sensed that his team's efforts in the information space might be more important to the long term outcome and

that their intelligence tools would be absolutely vital in focusing those actions.

Vignette 2

Imagining the concepts in action
Middle East, 2030. *Special Operations Task Force (SOTF) Operations Center, Semi-Autonomous Region of Argo (SARA) Defense Forces Headquarters Facility*

The Ops Center was a flurry of activity as usual. This was the second rotation of U.S. forces into the area since the United States had declared support for the semiautonomous region in the Middle East. There had been a number of unexpected events that converged and crystallized, leading to a sudden outpouring for independence and the cautious support of the United States President. However, the country of Zed which is the historical center of power in the region and a consistent spoiler towards American interests, viewed the Semi-Autonomous Region of Argo (SARA) as a threat. The administration had decided to keep the troop footprint as small as possible, providing behind the scenes support to the Saran government's efforts to build credible institutions and protect itself from outside interference. USSOCOM, committed globally to several pressing challenges, detailed MARSOC to own the Saran problem set and maintain the rotation of special operations forces there.

LtCol 'Stretch' Bailey, Commander of the Special Operations Task Force, had prepared his forces with a focused, tailored workup that was fortunately able to exercise new material capabilities identified and requested by the initial SOTF in addition to some unique authorities the command had arranged through the Theater Commander and SOCOM. Bailey's SOTF was not only the hub for all U.S. support to the Saran defense forces but also for the interagency support to Saran counterintelligence. There was an intentionally small State Department contingent in the capitol area with which the SOTF maintained an excellent relationship and integrated its efforts.

Bailey had just been briefed by the OIC of the SOTF's Cyber detachment

that someone (likely Zed sponsored) was attempting to tamper with the public webpage of a Saran public ministry. This had already happened six times in half as many days. On each occasion, the Raiders were the first to be aware of the intrusion and then reach out to the appropriate Saran agency to warn them and provide assistance. While these efforts hardly taxed the SOTF's capability, they constituted invaluable support to the fledgling Saran government that struggled daily to create an aura of competence and legitimacy. Moreover, these events validated the integration of the cyber detachment into the SOTF. With each passing day, Cyber was proving to be more and more valuable, especially with the uptick in the amount of threat activity occurring in the virtual realm.

Zed had incrementally escalated its campaign to sap the confidence of the local people in their new government through a combination of malign cyber activities, disinformation, and surrogate-supported international political roadblocks. It was an open secret that Zed was actively supporting and directing proxy militias that were operating in disputed zones along sections of what was a complicated tangle of overlaid borders.

There were essentially three boundaries in effect; an international one that the United States and area coalition governments recognized, another more expansive that the Saran government claimed, and a third claimed by the militias that encroached on the first and the second. This created a dilemma wherein Bailey's Raiders could accompany Saran troops within one swath of territory but had to stop short and revert to virtual advise and assist operations in areas that the United States deemed to be 'cross-border'. In addition to the confusing border situation, an increase in the number of militia men within these areas raised the frequency of border clashes and was leading to an overall increase in the level of violence. The militia's' response was to acquire increasingly heavy weaponry and escalate each subsequent clash. Unfortunately, the Sarans had no air force of their own and a combination of U.S. policy and threat anti-aircraft and counter-UAS

capabilities severely limited any U.S. aircraft from flying in the border areas.

To offset the lack of traditional aviation and ISR, Bailey's SOTF had direct access to a set of orbit of low earth 'cube sat' satellites, launched 6 months earlier to provide the SOTF 24/7 multi-sensor coverage of the battlespace. The small satellites supported the SOTF with a dedicated array of signals, thermal, FMV, tracking, and MASINT technologies that provided both real time situational awareness, targeting data, and pattern analysis inputs. This small cube sat constellation complemented the SOTF's organic collection capabilities, together they provided Bailey with the certainty he needed to act with precision in this politically high risk environment. The sensors fed into the SOTF's 'Watson' computer that compared pattern of life and terrain recognition across months of data and quickly cued the analysts onto any anomaly. He was watching the live feed from one of the satellites now as a split team of his men accompanied a Saran patrol within the border area where the Watson had suggested an enemy militia was forming for a potential attack.

Team 2, accompanying Saran patrol near the disputed border. The two Raider trucks lurched over the rough ground, kicking up dust that a tailwind was blowing forward and partially obscuring the collection of Saran 4x4s and old U.S. Humvees the Marines were accompanying. In the lead Raider truck GySgt Ortiz video conferenced with the SOTF and downloaded threat positions, verified through multi-spectral signals collections, to his display tablet, which would simultaneously appear on the Saran Platoon leader's display.

The gunny ended the videoconference with the SOTF and opened a new window with the Saran platoon leader. The partner lieutenant had halted his four vehicles. He explained that there was a danger area ahead about which he was concerned and asked if Ortiz could launch a scout to look ahead. Each Raider vehicle was equipped with a complement of small short range drones that it could launch and recover on the move. The scout drones provided a downlink with both day

and night video fused with thermal imagery and carried a small payload to weaponize if need be. More importantly, these drone were able to mark targets via a stand-off laser and provide a lasting 'tag', accessible to tracking and targeting sensors.

The scouts buzzed forward and were quickly out of sight, flying over the broken terrain ahead. One of the drones was specifically interrogating any electronic signatures and signals emanating from the ground, gathering them and relaying them automatically through the host vehicle and back to the team and SOTF headquarters' Watson machines for analysis. Signals consistent with military equipment were detected and one of Ortiz' men directed the drones over to get a closer look. As the small swarm closed on the location they picked up images and signatures that provided the Gunny with a solid idea of the enemy force size and disposition that lay ahead. Gunny Ortiz tagged what appeared to be the threat's command vehicle and then relayed this information to a secure 'cloud' where it could be viewed by higher as well as his partner force.

The gunny and the Saran lieutenant came up with a quick scheme of maneuver and briefed their small force. Saran ROE required that the platoon attempt to turn the militia away peacefully. If events escalated, they could use the force necessary to protect themselves. The vehicles resumed their road march and were met shortly thereafter by sporadic small arms fire from a hillside. Ortiz directed the Raider trucks to offset from the Sarans and use the stabilized remote weapons stations on the vehicles as a base of fire. Cued by the still flying drone swarm, the Americans accurately suppressed the area while the partner force dismounted and closed on the position. Adding to the fires' accuracy were the thermal sensors that caught the enemy muzzle flashes. The Scout drones caught the bulk of the militia withdrawing from the fight, leaving their wounded in place, to mount their vehicles and fall back to a nearby village.

Special Operations Task Force (SOTF) Operations Center. "You

sure?" LtCol Bailey asked his intelligence officer, who nodded confidently in the affirmative. One of the digital signatures that the team was collecting from the skirmish had pinged with a national level agency as a high level Zed facilitator. This individual was responsible for a long list of attacks and was a known high value target. The Inter Agency reps in the SOTF headquarters were also positive after corroborating human, open source intelligence, and intercepts that also placed him in the area.

Bailey looked carefully at a 3-D interactive map and conferred with his Master Guns. "They're trying to pull our guys cross border," the Ops Chief suggested. Bailey agreed. The quick withdrawal was uncharacteristic of the militia as they still had numbers in their favor. Maybe the militia had just been caught in the middle of a movement and were now trying to protect this Zed agent, but the skirmish had occurred just on the international border, and the militia had now withdrawn to a village clearly in the cross border disputed zone. Chances were strong that the militia already had cameras and reporters on standby to record any U.S. 'invasion' as well as supporters prepared to relay those images far and wide.

Bailey quickly conferenced Ortiz, "We want this guy, but your team needs to hold tight; you need to stay well clear of the border. Do your partners have one of the R2D2s?" The 'R2D2' was the slang term given to the new remote advise and assist sensor suite that resembled the iconic movie character. The R2D2 allowed the Raiders to see 360 degrees from the partner vehicle and bring to bear a variety of sensors as well as the collaborative displays and communications tools.

"Affirm, boss. They also have a full container of the magic darts." These darts were the containerized truck bed missiles that the partner force fired and which the Raiders would then assist with inflight terminal guidance. Once the Sarans fired the munition, using a simple touch screen interface on their map boards, Ortiz' men could remotely 'steer' the weapons to their targets using the scouts' tags, specific electronic signatures, or other inputs.

Just as the Zed proxies were jockeying to gain a 'news hit' from the engagement to support their position so were LtCol Bailey and his Saran counterparts. The SOTF stood ready to degrade social media broadcasts from anti-SARA regional influencers, while quickly disseminating images and themes to link the militia violence to this agent, and by extension, Zed. This was an area into which the SOTF had invested significant time and energy–a fact that the resulting battle drill more than demonstrated. The SOTF drew from a bevy of standing thematic objectives and media/messaging tools aligned to engender a sympathetic perception of events when an incident occurred. Experience proved that it was usually possible to quickly turn imagery (live or recorded) or official accounts into 'payloads' to be carried by the regional messaging fight.

Bailey could remember the Command's earlier attempts to integrate intelligence and information operations more closely. At the time he mentally compartmented those items as occasional supporting efforts to missions, he chuckled to himself as he watched his HQ scrambling right now, urgently preparing to capitalize on the physical fight. Now, it was hard for him to imagine an operation in which intelligence, actions on the ground, and IO exploitation were not blurred into a single effort.

Implementation

The publication of this document constitutes guidance for where we are going in the future, with the expectation that it will take the best ideas from across the Command to determine how we will get there. These concepts are critical to our growth as we take the experiences of our first decade and chart a future through broad discussion and dedicated action.

We will explore these concepts with the full realization that the journey will prompt discoveries along the way as the environment changes and our initial efforts bear results. It is a long term portfolio of investments and each effort within the concepts may not yield benefits on the same timeline or to the same scale. However, even less successful approaches within the concepts will

inform developments to come and have a net positive effect on the overall course of the organization.

This vision of our future will guide the allocation of resources and component time and energy. Initiatives beyond current operational requirements that do not nest within the four corners of 2030 will require careful consideration so as not to diminish our ability to make progress toward the long term goals outlined here.

Our challenge will be to create a sustained effort that translates the concepts presented in this document into tangible, employable capabilities. As we add capabilities that are necessary for future conflict, we will also have to make hard decisions about just how much we can expect to do well and of which capabilities we should divest ourselves. Our decisions in this regard must be pragmatic and realistic. We can neither afford to become infatuated with fanciful ideas of future combat, nor nostalgically hold on to skills, equipment, and capabilities that have outlived their utility.

The deliberate implementation has several facets. First, with the publication of this strategic vision we will seek out broad perspectives throughout the Command, from the service, and from across the SOF enterprise. This broad and diverse range of opinions will strengthen our first steps.

Next, the staff will incorporate appropriate direction and guidance within the subsequent campaign plans, capabil-

> *"Gentlemen, we will chase perfection, and we will chase it relentlessly, knowing all the while we can never attain it. But along the way we shall catch excellence."*
>
> *—Vince Lombardi*

Raider patch. (Image provided by MARSOC.)

ity roadmaps, and other directives to ensure all component efforts are properly aligned with the long term goals outlined here.

The Command will establish Innovation Pathways for each of the four concepts described here and begin to flesh out the 'how' by determining first steps and establishing near and mid-term goals. There may be overlapping solutions where the short term effort is simply a bridge to longer lead time approaches that require modifications to policy, new resourcing, or the development of capabilities.

We expect that the threat environment, policy backdrop, and available technologies will each continue to evolve and change as the efforts along the Innovation Pathways yield results. Therefore, our implementation must be flexible and adaptable to account for an evolving future. It is entirely possible that an opportunity will present itself that we have not foreseen; one that could offer MARSOC a future richer than any we have conceived. Our willingness to bring in new ideas, concepts, technologies, and solutions while adapting the development of capabilities with the evolution of the operating environment is what will make our Innovation Pathways 'innovative'. Change will be the norm and our internal assessments must link progress in our efforts with a continuous clear eyed view of the future operating environment.

The future is filled with uncertainty, fierce competition, and threats. There will be a stark requirement for SOF that are able to adapt to a wide array of operational environments and harness capabilities to fight across multiple domains. Our efforts now will ensure that MARSOF are the premier forces to meet tomorrow's challenges.

USMC

MARSOF as a Connector

Combined Arms for the Connected Arena

The Cognitive Raider

Enterprise Level Agility

KEY TERMS:

MARSOC: U.S. Marine Corps Forces, Special Operations Command is the Marine Corps' service component to U.S. Special Operations Command.

MARSOF: Marine Special Operations Forces refers generically to the operational force.

CSO: Critical Skill Operators are MARSOC's Special Operations tacticians. A Marine is designated a CSO upon selection and graduation from the Individual Training Course.

SOCS: Special Operations Capability Specialists provide direct support to special operations missions. They are screened, selected, and assigned to provide unique MOS skills sets. SOCS occupational fields include intelligence, communications, explosive ordnance disposal, canine handlers, and joint terminal attack controllers.

CSS Marines: Combat Service Support Marines are assigned to support billets throughout MARSOC and provide Special Operations focused combat service support across the Command.

Raider: In 2014, MARSOC officially adopted the moniker of Marine Raider, carrying the legacy of the Marine Raider Battalions of WWII forward into modern day MARSOF. Raider refers to each of the Marines and Sailors who serves within MARSOC, whether they are a CSO, SOCS, CSS Marine, Corpsman, or member of a staff.