

THE ENGINEER SHUFFLE:
AN ANALYSIS OF THE ENGINEER
ROLE WITHIN THE SC MAGTF CONCEPT

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At this moment in history, the United States is called upon to lead – to marshal the forces of freedom and progress; to channel the energies of the global economy into lasting prosperity; to reinforce our democratic ideals and values; to enhance American security and global peace. We owe it to our children and grandchildren to meet these challenges and build a better and safer world.

- National Security Strategy
Report: Preface

December
1999

How does the future of security cooperation look through the sights of an engineer? The short answer is that this has yet to be determined. As the Marine Corps positions itself to shift focus from Operation Iraqi Freedom, the Marine Corps leadership has started to look toward the future. In fact, the commandant's Security Cooperation Marine air ground task force (SC MAGTF) concept is an impressive attempt to gain ground in Phase 0 operations. However, the engineer component of this developing concept is extremely limited. The engineer capability that exists within a combat logistics company (CLC) reflected in the SC MAGTF does not provide any means of affecting most country infrastructure. In order to ensure success of the SC MAGTF concept, the Marine Corps must include engineering capabilities that answer the need of ENCAPs (engineer civic assistance projects).

Security Cooperation

Security Cooperation MAGTF

Task organized to meet specific COCOM requirements

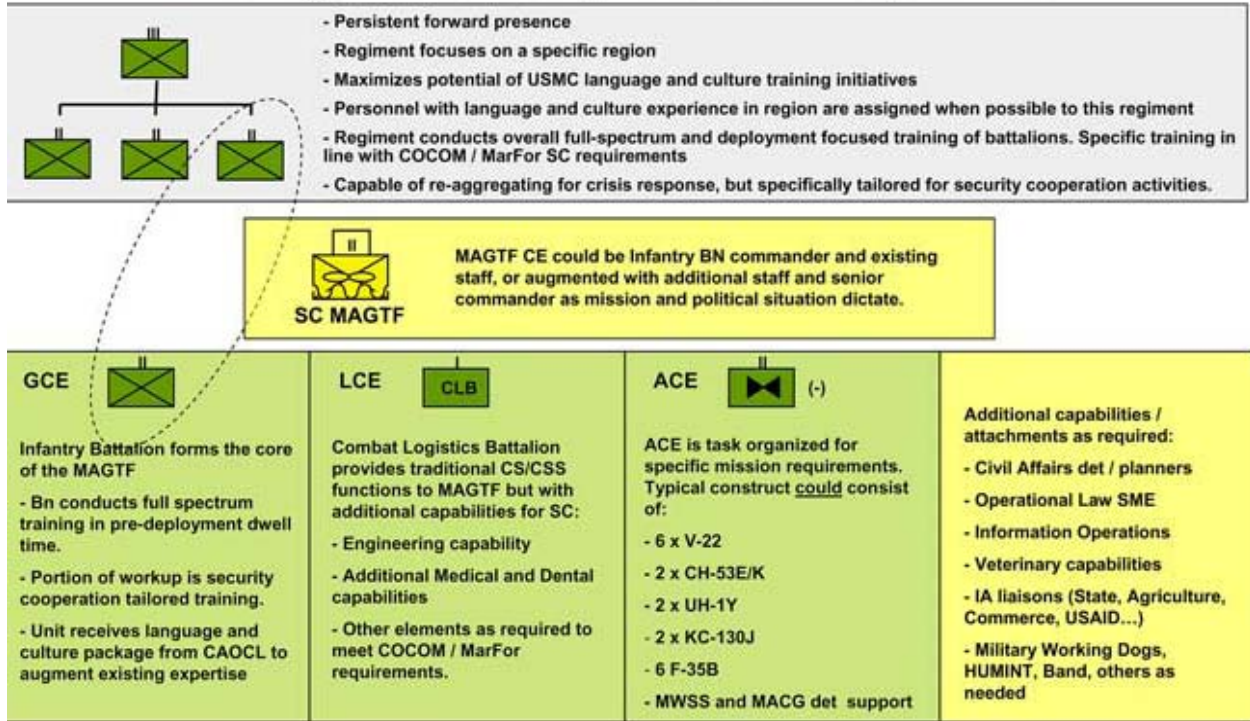


Figure 1¹

If the Marine Corps is to implement the SC MAGTF concept (see figure 1), it must ensure that the following essential goals are kept as the endstate:

- Champion aspirations for human dignity;

¹ Slide 9, "Long War Concept: The Marine Corps Vision for Strategic Force Employment ISO the Steady State Security Posture," PowerPoint, DC PPA&O, 26 November 2008.

- Strengthen alliances to defeat global terrorism and work to prevent attacks against us and our friends;
- Work with others to defuse regional conflicts;
- Prevent our enemies from threatening us, our allies, and our friends with weapons of mass destruction (WMD);
- Ignite a new era of global economic growth through free markets and free trade;
- Expand the circle of development by opening societies and building the infrastructure of democracy;
- Develop agendas for cooperative action with other main centers of global power;
- Transform America's national security institutions to meet the challenges and opportunities of the 21st century; and
- Engage the opportunities and confront the challenges of globalization.²

Emphasis, of course, should be placed on the prevention of conflict. Embracing the lower end of the conflict spectrum, specifically conflict prevention, has driven the formation of the SC MAGTF, yet engineers have been virtually overlooked. More important, adding engineering capabilities focusing on infrastructure will be a force multiplier.

Engineering Capabilities

The complex infrastructure needs of the regions that the SC MAGTF addresses will continue to pose a vulnerability to regional stability. Apart from the Marine forces theater requirements missions, the need for engineering may increase

² Overview of America's National Security Strategy, Section I, <http://www.whitehouse.gov/nsc/nss/2006/>.

exponentially as a result. Many third world countries have benefitted from the capabilities of Marine engineering. Infrastructure can be the most influential piece of local governance because it affects citizens' daily lives. Projects as simple as building a pioneer road in the jungles of the Philippines or a school in Bangladesh, can greatly enhance the immediate lives of locals. In the U.S., infrastructure is taken for granted. These simple improvements that engineers make around the world build vital relationships because the hard work results in visible edifications that will continue to strengthen our building partnership capacity.

Combatant commanders (COCOMs) have long discerned the need to focus on Phase 0 operations in order to prevent aggression within their regions,³ and have moved to address the needs of Theater Security Cooperation (TSC) in greater depth. The non-doctrinal concept of SC MAGTF has invited resistance from the conventional manning that exists with the Marine expeditionary units (MEU) in part because of the omission of engineering from the SC MAGTF mix. The SC MAGTF structure as prescribed in the Long War (see figure 1) needs to be challenged. COCOMs will not be able to depend on the engineer capability that exists within

³ Slide 3, "Long War Concept: The Marine Corps Vision for Strategic Force Employment ISO the Steady State Security Posture," PowerPoint, DC PPA&O, 26 November 2008.

a CLC for their infrastructure support. Therefore, SC MAGTFs need to incorporate these requirements when task organized.

In addition, engineers, as light infantry, can add combat skills training into their training packages when conducting security cooperation missions. Ideally, engineers are not the designated units to conduct this type of training, but the need infantry base must maintain a presence within the SC MAGTF to build the security forces of the country or region targeted. The residual effects of engineering projects can bridge the gap between U.S. diplomatic aims and national defense strategies. Integrating engineering into the mix, even if COCOMs and TSC requirements desire a package organized to support security forces, can meet the TSC endstate of building partner nations.

Although Phase 0 has a friendlier focus, the need to address Phase 1 has also been raised by the SC MAGTF. Show of force and forward deployed combat-ready forces offer the deterrent necessary to provide the stability in those regions on the brink of conflict. The Marine Corps' ability to apply force or threat of a force on a potential foe is critical to force protection and discourages irregular actors. A more substantial engineer capability also trained to augment the infantry will not diminish SC MAGTF objectives.

ENCAP Needs

The Marine Corps must determine a response to the aggregate demand for forces in order to locate the right percentage of people and resources at the right place.⁴ In the full spectrum of conflict, capability and combat power guides the Marine Corps' decision. The dangers of focusing on task organization will reduce combat power in the SC MAGTF.

The old adage of "risk versus gain" is forever present in the prevention of irregular threats. ENCAP exercises have built partner relationships: Missions have been conducted in Bangladesh and Cambodia. Indonesia and Colombia have also sought to receive engineering training and assistance.⁵

From the squad and platoon level, interoperability and bilateral training has greatly benefitted the Marine Corps engineers as well. Vertical and horizontal construction are perishable skills and often difficult to train, both host nation and U.S. forces alike. ENCAP exercises provide that solid foundation from which other engineering skills can be developed. For instance, the individual training standards (ITS) for a 1371

⁴ A dilemma that has not been agreed upon by the Marine Corps and subsequently a reason that the SC MAGTF is still a concept.

⁵ This author was part of a training team sent to focus on bulk fuel in Tumaco, Colombia. During this two-week training period, Marine Corps Martial Arts and weapons training were conducted outside of the bulk fuel training premise.

combat engineer will have difficulty meeting all of the vertical and horizontal standards if assigned to a combat engineer battalion. Cross-training engineers from the division with those from the rest of the MAGTF will benefit the mission and the marines.

The Engineer Answer

In 2007, the Chinese established a 315-member unit in Darfur composed of three platoons of engineers that dug wells, built roads, and built a field hospital.⁶ As of July 2008, they had sent the rest of the unit to Darfur. Likewise, in November 2008, the Chinese committed to build a billion dollar road in Nigeria. China's interest in security cooperation, a shift in global politics, foreshadows events towards SC missions in the rest of the globe. Conceivably, India may also establish the same cooperation goals using China as an example. India also possesses a large population and an expanding economy from which to influence its partner nations. If the SC MAGTF is to be enduring in nature, a deliberate engineer plan must be established within the SC MAGTF and closely coordinated with embassy planners and U.S. AID. If the Chinese can establish an

⁶ "Chinese army engineers head to Darfur this week." Associated Press, 21 November 2007.

independent/cooperative engineering capability, the Marine Corps can assemble a like capability within the SC MAGTF.

The largest hurdle, outside of the monetary hurdle will be the regionalization of equipment. Utilizing a host nation's own engineering equipment may not be the answer. The equipment in some countries may be inadequate to accomplish a mission. Fly-in echelon equipment may be costly but more respectable and feasible than renting equipment in a small town in a third world country.

A potential answer can be found in a joint engineering effort. Each service organization brings a unique capability. Air Force Prime Beef and White Horse, the Army Corps of Engineers, and the Navy Seabees all have more enduring general engineering capabilities that can be organized for a regional need. Each service continues to conduct ENCAP (or ENCAP-related) missions throughout the world. The Marine Corps, especially the reserves, could also capitalize on such ventures. The reserves are always searching for projects, especially abroad, that can be used to conduct relevant MOS training. Also, the Marine Corps Reserves will provide an abundant resource in fulfilling any active duty deficiency. Synchronization of these efforts will need to be initiated from the Joint Chief level to the State Department. A better source of equipment can be found with long-

standing allies, such as Great Britain. Mr. Gates stated in his Defense Strategy that

the capacities of our partners vary across mission areas. We will be able to rely on many partners for certain low-risk missions such as peacekeeping and humanitarian assistance, whereas complex counterinsurgency and high-end conventional operations are likely to draw on fewer partners with the capacity, will, and capability to act in support of mutual goals. We will support, train, advise and equip partner security forces to counter insurgencies, terrorism, proliferation, and other threats. We will assist other countries in improving their capabilities through security cooperation, just as we will learn valuable skills and information from others better situated to understand some of the complex challenges we face together.⁷

The benefits from increasing the engineering efforts for the SC MAGTF certainly outweigh the consequences of not establishing a general engineering portion within the CLC. An ENCAP-focused SC MAGTF will benefit the Marine Corps; however, more important, it will promote U.S. interests abroad through the development of infrastructure, bilateral engineer training, and joint engineer interoperability. If this concept is not addressed, a more geographically focused engineering capability detachment should be formulated to support security cooperation and stability efforts.

⁷ National Defense Strategy, [Http://www.defenselink.mil/news/2008%20national%20defense%20strategy.pdf](http://www.defenselink.mil/news/2008%20national%20defense%20strategy.pdf), page 15

Financial issues, as eluded previously, will be the most stiff resistance to an engineer focused SC MAGTF. Money will continue to be an issue. As argued in this paper, there are several ways in which the Marine Corps will be able to circumvent these issues. With the 202k build-up complete, engineers, as a high-demand MOS, will relieve the stress normally associated with the engineer community.

Conclusion

Because of the close working relationships of their Embassies throughout the world and NGOs, theater-specific engineering requirements identified by the State Department will continue to drive the efforts of humanitarian assistance. Therefore, exploitation of the channels that funnel assistance, such as the U.S. Agency for International Development are paramount to shaping the security cooperation efforts. The Marine Corps needs to fight bureaucracy to win the Long War and prevent regional conflicts.

Instability around the world has forced the Marine Corps to create a concept to address this global issue - the Security Cooperation Marine air ground task force. The SC MAGTF concept will meet the national defense strategy while maintaining U.S. national strategic objectives in shaping the environment in Phase O. While the concept provides an accurate picture of the

potential accomplishments, the SC MAGTF composition has yet to become a reality. The intention of the SC MAGTF would be best met with greater emphasis on the engineer role. In order to accomplish the missions of the SC MAGTF, more enduring in scope than the traditional MEU, a more robust engineering capability must be established. The historical examples of ENCAPS should be used as a template, so the United States can neutralize a threat before it exists and develop American global influence.

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