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MASTER OF MILITARY STUDIES

TRANSFORMING USMC INTELLIGENCE TO ADDRESS IRREGULAR WARFARE

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Executive Summary

Title: Transforming Marine Corps Intelligence to Address Irregular Warfare

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Thesis: The challenges of Irregular Warfare and the nature of the Marine Corps as the nation's "911" force demand the intelligence community modify its training, doctrine, and organization to ensure the MAGTF commander's intelligence requirements are met.

Discussion: Since the fall of the Soviet Union and the end of the Cold War, the world has become significantly less polarized. The consequences of this condition have dynamically altered the balance that had existed after World War II and has left many countries without the economic and security blanket to which they had grown accustomed. This global instability, in addition to a dramatic increase in Islamic terrorism, has forced the United States to become increasingly involved in small conflicts around the globe. These conflicts have ranged in complexity as well as intensity, but the one consistent theme is that they rarely involve military action with a conventional foe. Another aspect of these conflicts is that they have a tendency to emerge quickly and with little warning. The Marine Corps' role as the nation's "911 force" demands that it be prepared to face these irregular warfare challenges with little or no preparation time. This presents a daunting challenge when considering the deployed Marine Air Ground Task Force (MAGTF) will more than likely be expected to function both in a military capacity as well as a conduit for other elements of national power.

This places an extremely heavy burden on the intelligence units supporting these efforts. Intelligence support in irregular warfare demands precision, restraint, cultural familiarity, and linguistic competence that exceeds what is required for conventional conflicts. These types of activities take significant amount of time to cultivate as well as to maintain proficiency. Fortunately, the preponderance of the new challenges can be achieved with existing resources and revolve around building the capabilities of the individual Marine.

Conclusion: To conduct intelligence collection and analysis in irregular warfare the Marine Corps will need to change certain aspects of intelligence structure, training, and doctrine. Most of this will not be straight forward and will require staunch support from the Marine Corps' senior intelligence leadership to be successful.

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D.

PREFACE

The dramatic challenges of a post 9/11 world have radically increased the need for timely and accurate intelligence in order to achieve success on today's battlefield. While assigned to the National Security Agency and I Marine Expeditionary Force (MEF) or deployed to Afghanistan and Iraq, I frequently observed spectacular individual performances that satisfied these amplified intelligence demands. However, I observed one significant problem: those individuals fulfilling complex intelligence demands could rarely attribute these skills to a result of thorough preparation by the intelligence or military supporting establishment prior to the individual's deployment. Thus, in Operation Enduring Freedom and Operation Iraqi Freedom success hinged on the abilities of individuals versus institutional processes. Over the course of the last seven years the intelligence community has failed to sufficiently rebuild or transform its training, doctrine, and organization to support the current and future demands of irregular warfare (IW). Transformation while embroiled in multiple conflicts is tremendously difficult, but it is absolutely essential to shift success from individual performance to institutional excellence.

The goal of this paper is to identify areas where the Marine Corps can improve its intelligence capabilities in order to be prepared to face the current and future IW threats.

Although there are numerous positive initiatives currently in place and more being established, my research focus was designed to identify where Marine Corps intelligence is still deficient in relation to IW. Research and conclusions are also predominately oriented towards the active duty component although some topics have Marine Corps reserve implications. The information resident in this paper is current through the winter of 2007-08. Therefore, certain deficiencies

and recommendations may either be recognized or already being instituted within the Marine Corps intelligence community.

While making these recommendations, I am very cognizant of the need to maintain a capability to support a conventional force that can ensure the vital interests of the nation. Some of these recommendations are minor adjustments to the current system, but others will be contentious and significantly deviate from the current methodology. Whether we can achieve them quickly or over a lengthy period of time, the goal must be to ensure we can fight and win both conventional and irregular conflicts with the most effectiveness possible.

I am extremely grateful to the Marines and civilians who helped me gather reference material, as well as provided me opportunities to interview them in their various areas of expertise. In particular I'd like to thank Col Jay Bruder, LtCol Mike Lindemann, Maj Mike Challgren, Maj Andy Weis, Capt Russ Harris, and MSgt Tawnia Converse from Headquarters Marine Corps; Maj Henry Blackshear from Marine Corps Systems Command; LtCol Fred Egerer from Marine Corps Intelligence Schools; and Mr. Steve Foster from the Marine Corps Intelligence Activity. These individuals went out of their way to provide me doctrinal references, point papers, and personal opinions which helped to influence my conclusions. I must also recognize the contributions of Dr. Donald F. Bittner, LtCol James Herrera, and Maj Randy Pugh in transforming my concepts into a coherent and administratively complete document.

The last person I would like to recognize is my wife, Nora Pencola. Absent her organizational competence to tie thoughts together and sequence ideas, this paper would never have made it to print. In addition, her patience and support never wavered despite quite a few long nights committed to the research and conclusions associated with this paper.

INTRODUCTION

In the post-September 11 world, irregular warfare has emerged as the dominant form of warfare confronting the United States, its allies and its partners; accordingly, guidance must account for distributed, long-duration operations, including unconventional warfare, foreign internal defense, counterterrorism, counterinsurgency, and stabilization and reconstruction operations.

1 Quadrennial Defense Review (2006)

The operational environment the Marine Corps will face in the first half of the 21st century is significantly different than that of previous decades. The long standing objectives to defend the homeland and conduct conventional campaigns abroad now include a third objective: To "[p]revail in the War on Terror and Conduct Irregular Operations." These national defense pillars and their relationship with one another are outlined in Appendix A. Achieving these national defense objectives will require a shift from the time-honored role of the Marine rifleman to "locate, close with and destroy the enemy through fire and maneuver," to a host of missions not military in nature. At the heart of this change is the necessity to conduct irregular warfare (IW). The primary objective of IW involves achieving popular support of the people and denying it to the adversary. Although the Marine Corps intelligence community has experienced significant success in IW waged in both Afghanistan and Iraq, this success is more attributable to individual performance than doctrine, training, and organizational techniques designed to operate in such environments.

The epicenter of IW encompasses the concept of waging a war of ideas to garner popular support and create order rather than simply killing or capturing an enemy. Popular support is necessary to establish legitimacy for friendly forces and the government or non-state actor being supported. FM 3-24 identifies six criteria to assess what constitutes legitimacy in relation to the specific conflict and these are listed in Appendix B.⁵ Gaining control and establishing legitimacy with the population cannot be achieved solely through the application of military

power. It also requires a breadth of skills traditionally not required to conduct Major Combat Operations (MCO). To defeat these threats the Marine Corps must prepare itself to play a supporting role to interagency organizations better organized to deliver the other instruments of national power. The 2006 *QDR* stated "although many U.S. Government organizations possess knowledge and skills needed to perform tasks critical to complex operations, they are often not chartered or resourced to maintain deployable capabilities," thus potentially requiring the Marine Corps to act as a proxy on behalf of other government agencies. In order to prepare for these new challenges, Marine Corps intelligence must adapt to satisfy intelligence needs for both these other elements of national power in parallel with military demands. In light of these adaptations, a three-fold approach is required: language and cultural competencies must expand, collection and analysis methodologies must be modified, and regional training centers with modular training solutions designed to cater to specific conflict requirements must be established.

CHARACTERIZING THE IRREGULAR WARFARE ENVIORNMENT

Defining the IW Threat

Irregular Warfare (IW) is defined as a violent struggle among state and non-state actors for legitimacy and influence over the relevant populations. IW favors indirect and asymmetric approaches, though it may employ the full range of military and other capabilities, in order to erode an adversary's power, influence, and will. It is inherently a protracted struggle that will test the resolve of our nation and our strategic partners. ⁷ - Irregular Warfare Joint Operating Concept

The geopolitical relationships of the 21st century are more interwoven than ever before. Global trade, access to information, and advancements in technology has created conditions in which regional instability has far-reaching effects. Instability due to terrorism, civil war, rampant crime, corrupt governments, failed states, weapons of mass destruction (WMD) proliferation, or natural disasters can have global effects that warrant a range of responses by the

international community. IW conflicts often grow from the inherent instability present in politically and economically weak regions. Ambassador Dell Dailey, speaking on the means to effectively combat terrorism, said that:

[f]or the United States to make substantial progress in its global efforts against terrorism, it must employ a multi-layered strategy that makes full use of its range of resources. The United States must disrupt terror networks, fight extremism, support liberal institutions, combat government corruption, and continue to build its military and security programs. Since it is impossible to incarcerate or kill every terrorist, the United States must target the root causes of terrorism by supporting local democratization efforts and working to help countries achieve the rule of law. This constructive, rather than destructive, approach will win Washington allies around the world.⁸

The current struggle against terrorism has unique qualities, but Marine Corps history is rife with similar IW conflicts. The Boxer Rebellion, interventions in Nicaragua, the Dominican Republic, and Haiti in the interwar years all qualify as IW operations. These conflicts used to be referred to as Small Wars and were defined as "operations undertaken under executive authority, wherein military force is combined with diplomatic pressure in the internal or external affairs of another state whose government is unstable, inadequate, or unsatisfactory for the preservation of life and of such interests as are determined by the foreign policy of our Nation." Although the definition of a Small War does not articulate the emergence of non-state actors, it does capture the essence of an IW conflict. In general, these conflicts require operations along four broad lines of operation: information, intelligence, developing capabilities, and combat operations (see Appendix C for supporting tasks).

Future operating environments will involve more than just non-state actors, criminals, and terrorists that constitute potential IW threats. These threats will also include peer and near peer competitors. For example, current Chinese military procurement strategies are also designed to invest in asymmetric capabilities.¹¹ The United States technological advantage in

conventional MCO over any nation is so great that even potential foes with established conventional forces are likely to employ IW methods in any conflict.

Hand in hand with IW is the need to provide military support to Stability, Security,

Transition, and Reconstruction (SSTR) missions in order to "keep the ground" achieved through success on the IW battlefield. As outlined in Department of Defense (DOD) Directive 3005.05,

SSTR is necessary to "establish order that advances U.S. interests and values." To further reinforce its significance, DOD has mandated that SSTR shall be given equal priority to combat operations. The IW JOC catalogues SSTR as part of the range of missions expected in IW. The boundaries that delineate what constitutes SSTR, IW, and MCO are thus not firm. Appendix D provides an example of how SSTR, MCO, and IW missions intertwine. Future IW conflicts will demand intelligence personnel skilled in a wide range of areas and who can comfortably maneuver between SSTR and MCO in parallel with supporting IW objectives.

Determining Where IW Will Be Waged

There exists an "arc of instability" stretching from the Western Hemisphere, through Africa and the Middle East and extending to Asia. There are areas in this arc that serve as breeding grounds for threats to our interests. Within these areas rogue states provide sanctuary to terrorists, protecting them from surveillance and attack. Other adversaries take advantage of ungoverned space and under-governed territories from which they prepare plans, train forces and launch attacks. These ungoverned areas often coincide with locations of illicit activities; such coincidence creates opportunities for hostile coalitions of criminal elements and ideological extremist.

15 – National Military Strategy (2004)

The geographical areas where IW will likely occur provide a crucial element in preparing Marine Corps Intelligence. Knowing the geographic area allows the Marine Corps to identify and assemble culture and language skills necessary to conduct intelligence operations. Appendix E graphically depicts the expanse of the arc of instability. This zone of potential conflict

contains an extremely large volume of languages and a wide diversity in cultures. Although unreasonable to expect the military to operate across this entire expanse simultaneously, the 2006 QDR identifies the need to shift from single focused threats to multiple complex challenges. The vast range of language and cultural skills coupled with the need to support simultaneous operations indicates the Marine Corps must accept the risk of a lack in depth in order to prepare an intelligence capability that is responsive to a breadth of requirements.

A Cooperative Strategy for 21st Century Seapower observes that "[t]he vast majority of the world's population lives within a few hundred miles of the oceans. Social instability in increasingly crowded cities, many of which exist in already unstable parts of the world, has the potential to create significant disruptions." These findings indicate Marine Corps intelligence must orient on urban intelligence gathering techniques and be prepared to characterize massive and shifting urban populations. The 21st Century Seapower strategy also concludes that "credible combat power will be continuously postured in the Western Pacific and the Arabian Gulf/Indian Ocean to protect our vital interests, assure our friends and allies of our continuing commitment to regional security and deter and dissuade potential adversaries and peer competitors." This presence provides an opportunity to organize intelligence sharing and cooperative intelligence gathering mechanisms with regional partners. Given these variables, Marine Corps intelligence capabilities must be flexible, pre-assembled, and routinely engaged with foreign partners. The geography of the arc of instability coupled with the intrinsic difficulty in predicting where the next conflict will be requires a wide range of language and cultural competencies, coupled with the means to shift resources quickly as new threats become evident. Harnessing coalition partnerships to augment Marine Corps intelligence efforts and maintaining

a wide range of language competencies will be crucial to assuring a responsive and capable intelligence apparatus.

EXPANDING LANGUAGE CAPACITY

Expanding Marine Corps Intelligence Language Capabilities

International terrorism, a major threat facing the United States in the 21s century, presents a difficult analytical challenge. Techniques for acquiring and analyzing information on small groups of plotters differ significantly from those used to evaluate the military capabilities of other countries. U.S. intelligence efforts are complicated by unfilled requirements for foreign language expertise. ¹⁹ – Intelligence Issues for Congress

As the DOD and USMC work to partner with regional allies and partners to mitigate and counter irregular threats, organic language capabilities will be required to communicate with those allies, and to conduct multi-lateral and unilateral intelligence operations. In 2005, the Marine Corps Center for Lessons Learned (MCCLL) stated "[n]umerous studies are now confirming the need for greater language and cultural awareness training. Arguably foreign language capability for every Marine is as important as the Martial Arts Program, and should receive equal consideration in training prioritization." With respect to the types of languages, their recommendations concluded "language assignments would be made to all Tier One, Two, and Three Countries, plus all allied and coalition nations." Although the MCCLL does not specify the tier system, the author believes it relates to Presidential Decision Directive-35, which was created to guide the allocation of intelligence resources against specific priority countries. 22

More than any other MOS discipline, <u>Intelligence requires cultural and language</u>

<u>competencies to perform the duties</u> required for IW. However, the number of intelligence

Marines currently assigned to learn and maintain a language is not nearly sufficient to address the wide range of languages necessary to operate across the arc of instability. Appendix F

outlines the primary intelligence MOSs. Note, only the cryptologic disciplines have dedicated linguist personnel. According to Headquarters Marine Corps (HQMC) Intelligence department, there are 622 267X linguists out of a total 2600 enlisted population of 1983.²³ Although the 0200 MOS does not assign language as a primary MOS, 338 table of organization (T/O) line numbers are coded for language skill as a secondary MOS. However, out of a 0200 enlisted population of 2518, only 74 Marines qualify as linguists.²⁴ These bleak numbers deserve two caveats. First, not all Marines assigned to the 2600 or 0200 MOS receive qualifying Defense Language Aptitude Battery (DLAB)²⁵ scores necessary to attend the Defense Language Institute (DLI) (DLAB requirements for language categories are available in appendix G). In addition, the operational tempo (optempo) associated with Marine Corps wartime commitments frequently does not accommodate DLAB qualifying Marines to participate in lengthy language training opportunities. However, turning these numbers into an overall percentage across the intelligence discipline provides disturbing results. Out of 1983 Marines assigned the 2600 MOS, only 31% are linguists. Within the 0200 MOS these numbers are a precipitously low 3% of the population. This suggests language competency is not an institutional priority when compared with other intelligence expectations.

In a previous article on the transformation of SIGINT to address IW, the author recommended assigning all SIGINT personnel a language in which to develop a basic competency. Satisfying the wide breadth of language requirements requires broadening language skills to all intelligence personnel. The assignment of languages should balance an individual Marine's ability to learn a language (determined by DLAB) with projected needs for the Marine Corps. Transformation must be gradual and initial efforts should focus on local unit managed training completed in conjunction with other unit training objectives. Self-paced

instruction, mobile training teams, and mentor education solutions can begin filling this void. This method will not get Marines to a 3/3 aptitude on the Defense Language Proficiency Test (DLPT) (appendix H provides DLPT aptitude details), but will suffice to satisfy low level language needs necessary for document and media exploitation. As Marines gain rudimentary proficiency they should attend DLI or other formal immersion language programs to further develop these language skills.

Broadening language training to all intelligence personnel has other considerations as well. Language education should also include an immersion in the cultures employing that language in order for it to enhance analytic effectiveness. Both the language and cultural skills are perishable and require sustainment training to maintain proficiency. For this program to have long term effects, incentives will be required for Marines and unit leadership to take seriously. Monetary incentives are already in place through the Foreign Language Proficiency Program (FLPP),²⁷ but unless progress in language is tied to promotions across the intelligence community such an initiative will not be institutionalized.

Embracing language training will also entail amending manpower allocations. Marines are more likely to sharpen and advance linguistic and cultural proficiencies <u>if given opportunities</u> to <u>employ them</u> in regions where they are required on a daily basis. The 2006 *QDR* identifies the need to "increase the number of commissioned and non-commissioned officers seconded to foreign military services." The Marine Corps should make a concerted effort to assign intelligence personnel early in their career to overseas assignments to work with allies and regional partners to develop their language proficiency. In doing so, the Marine Corps must establish measures to allow these assignments to enhance promotion opportunities instead of hindering them. This 'capstone' education will reduce availability to do traditional B Billet

assignments, but will notably enhance the language competencies of the individual Marine as well as reinforce relationships with regional partners.

Balancing Language Skills between the Active and Reserve Components

Better balancing IW and MCO language requirements between the active and reserve component can potentially mitigate Marine Corps breadth in low-density languages. The creation of the Intelligence Support Battalion and the addition of 200 selected Marine Corps Reserve personnel provide newfound flexibility in this area.²⁹ The arc of instability's wide range of languages demands diversifying the active duty language mix to invest in numerous lowdensity languages. The largest challenge in achieving this objective is the length of time required for the Marine Corps to shift language throughputs to address the next looming IW threat. Many of the potential areas within the arc require very difficult language skills, which can take in excess of 18 months to learn (appendix G provides the duration of each DLI language program). Efficiencies between active duty and reserve components can be realized by using the reserve component to address enduring language requirements associated with peer and near peer competitors, thereby releasing a larger pool of active component linguists to be responsive to shifting global priorities. The reserve language mix would not be nearly as wide, but provide the depth required to support MCO. The largest documented demand for language is published OPLANs that are predominately oriented on conventional scenarios. The Marine Corps should pursue placing the bulk of OPLAN language requirements in the reserves assuming that MCO will coincide with major reserve activations. This can provide active duty language structure more flexibility to shift in response to the fluid demands of IW.

Coalition Partnerships

Although our forces can surge when necessary to respond to crises, trust and cooperation cannot be surged. They must be built over time so that the strategic interest of the participants are continuously considered while mutual understanding and respect are promoted. ³⁰ – A Cooperative Strategy for 21st Century Seapower

Coalition and regional partnerships play a critical role in IW. Strong partnerships with numerous countries ensure language and cultural resources are available on short notice.

Partnerships often maximize limited resources, and nearly every major strategic guidance document mandates the services make this a priority. Nowhere is the need for partnerships more apparent than in intelligence. A regional partner that shares a border with a country of interest will always have more linguistic and cultural familiarity than those organic to the Marine Corps due to that partner's security and economic interests at stake. They will often be more capable of assessing the environment, gathering intelligence through pre-existing networks, and providing thorough and culturally accurate analysis at the onset of a conflict. Exchanging information and conducting complex operations with coalition partners requires commitment over an extended period. Conducting frequent exercises will provide insights into that partner's strengths and weaknesses, identify where partnering benefits both organizations, and most importantly creates relationships and builds trust.

Associated difficulties exist when assembling partnerships in the field of intelligence.

Language and cultural barriers, force protection concerns in the country of interest, and career track progression all present challenges to military exchange programs. The sharing of classified information consistently provides one of the largest complicating aspects of these programs. The highly classified and technical nature of the U.S. intelligence architecture makes foreign disclosure and intelligence sharing extremely difficult. Many regional allies lack technologically advanced intelligence architectures, and attempt to compensate with mature

HUMINT networks. Resolving foreign disclosure and intelligence sharing processes has the potential to blend DOD and partner capabilities into a more cohesive intelligence apparatus.

Currently, the officer exchange program between the 3rd Radio Battalion and the Australian 7th Signals Regiment remains the only Marine Corps intelligence exchange program. 32

Instituting military exchange relationships with various regional partners would strengthen ties between intelligence organizations and broaden intelligence networks. Fortunately, the Australians have the resources to participate in an exchange program. Unfortunately, many of the countries where partnerships would be beneficial to U.S. interests do not have sufficient resources to send their personnel as part of an exchange. Under these circumstances, offering military assistance without reciprocity could alleviate the burden on the coalition partner. A relationship of this kind would require an individual that provides the host nation something of value. This could come in the form of providing training to the host nation, or by acting as a conduit for intelligence related to the shared interests. Although some intelligence remains difficult to share, commercial imagery, geospatial products, and tactically collected intelligence provide ample amounts of material to solidify relationships. Failing to provide training or access to intelligence will hamper the goal of establishing an enduring and productive partnership.

INTELLIGENCE COLLECTION AND ANALYSIS DEMANDS UNIQUE TO IW Census Operations, Company Level Intelligence Cells, and MAGTF Intelligence

Commanders of battalions visited by a MCCLL collection team between September and December 2006 reported that the intelligence information provided by higher headquarters was inadequate. Each battalion commander took steps to collect, analyze, package and produce actionable intelligence at his own level. 33 – Intelligence Capability Enhancements, MCCLL

Defining the <u>human terrain</u> is the single most important intelligence objective when conducting IW. Belief systems, ethnicity, religion, tribal politics, and social structures are all variables to consider when fighting for popular support. However, these elements vary significantly within the same regional conflict. This means that basic encyclopedic information on a country does not satisfy the level of detail required at the village, city, or provincial level. Unfortunately, the required information rarely exists at the start of a conflict due to the economically depressed and politically unstable areas in which IW will be waged. These conditions lead to a lack of structure normally observed in western society (phone books, street addresses, police files etc) which could partially define the human terrain. Under these circumstances, one of the most effective ways to define human terrain is by conducting systematic census operations.

Permanently assigning the task of census operations to small unit forces is a natural relationship. Squads and platoons account for the overwhelming preponderance of interaction with the indigenous people. This reliance on small unit interaction clearly emphasizes the notion that "every Marine is a collector" more than in previous conflicts. It thus necessitates a genuine and benign reason for the small unit to interact with the population and therefore initiates the establishment of positive bonds with the population. Census operations consequently have the indirect benefit of supporting the main effort in IW. Census missions must be <u>both a routine and mission essential activity</u>. This helps maintain census data despite a shifting environment.

The collection of census information should be a decentralized task, but the content and cataloguing of census data needs to be an extremely centralized one. Appendix I provides an example of a census form currently employed in Iraq. Maintaining a current census on villages and provinces has a number of benefits to the small unit collecting it as well as to senior echelons

within the MAGTF. Census data can help clarify an otherwise ambiguous intelligence report by providing local context to assess it. It can also discern potential social and ethnic rifts and boundaries within a community. Census data is particularly important in identifying when bad actors enter an area of operations. Individuals arriving into an area that are not reflected in local census data can tip a commander to emphasize security operations in preparation for an upcoming attack. It can also enable the local unit to expose potential insurgent cover stories by confirming its validity through trusted residents of the local community. Census structure is not only useful for security, but also has utility in setting a framework for the rule of law. During the Vietnam War, Provisional Reconnaissance Units relied heavily on information derived from the Census Grievance Program to arrest Viet Cong agents. The success achieved reinforced security as well as the legitimacy and control of the South Vietnamese Government.

The Company Level Intelligence Cell (CLIC) should be the main effort in the systematic collection of census information. In addition to this role, findings from the MCCLL indicate that CLICs have also enhanced other intelligence needs at the small unit level. ³⁶ CLICs conduct limited all source analysis, process enemy personal effects, and provide an opportunity for small units to proactively engage threats. However, the central focus of these CLICs should focus on conducting census operations. These cells are trained by Marine Corps Intelligence Schools during a two week session designed for infantry personnel. ³⁷ The curriculum includes basic intelligence processes, tactical questioning, site exploitation, and intelligence information reporting formats. ³⁸ This duration, while adequate to create a framework for executing census operations, does not sufficiently train Marines to manage all aspects of an all-source fusion process and census operations simultaneously.

The CLICs developed out of a need to enhance small unit intelligence capabilities, but do not serve as a replacement for the existing intelligence structure within the MAGTF. Rather, CLICs provide an added intelligence layer necessary to wage IW. The MCCLL assesses that:

Enemy dispositions and locations have become less obvious to our sensors and understanding their motivation and intentions has become increasingly more difficult even for our experienced analyst...The warfighter that is closest to the threat, who more than other has the requirement and capacity to engage and destroy the enemy, is least served by the Common Operational Picture (COP).³⁹

A large divide exists between the preponderance of intelligence collection and analysis efforts and the intelligence demands of the small unit. Considering that the overwhelming majority of IW engagements occur at the small unit level, the Marine Corps should make a concerted effort to push additional collection and analytical resources down to the battalion and company level to satisfy small unit intelligence requirements.

During Vietnam, Robert Komer initiated the Phoenix Program specifically to bridge this type of divide. Although the Phoenix Program was designed to bring together disparate intelligence service activities to dismantle the Viet Cong shadow government, the Marine Corps can draw lessons from this programs principle goal of establishing a responsive intelligence/operations capability. Intelligence and radio battalions currently do not allocate sufficient collection or analytic resources to the small unit level. Additional collection and analysis resources co-located with small units, but accountable to their parent unit, will further exploit the success realized by CLICs. This will further serve to integrate CLICs into the holistic intelligence effort while simultaneously increasing the situational awareness of higher echelons of the MAGTF. The proximity will not only enhance responsiveness of the intelligence operations cycle, but also solidify trust between collection disciplines.

Expanding the Collection and Analytic Focus

Without good intelligence, counterinsurgents are like blind boxers wasting energy flailing at unseen opponents and perhaps causing unintended harm. ⁴² FM 3-24 *Counterinsurgency*

Intelligence analysis in support of IW has different considerations than those required for MCO. The need to secure the confidence of the people increases the consequences of ill-timed or inaccurate kinetic and non-kinetic effects. When attempting to engage the enemy, careful consideration must be given to protecting non-combatants. Failure to do so undermines the primary goal of achieving popular support. Extensive census information and persistent ISR⁴³ are key enablers that will help mitigate the problem of distinguishing combatants from non-combatants. The procurement of persistent ISR technologies goes beyond the scope of this paper. Appendix J provides a synopsis of some procurement priorities that would enhance IW intelligence collection capabilities. The values of census operations have already been enumerated, but clandestine and invasive intelligence techniques have a significant role to play as well.

The established disciplines of SIGINT and HUMINT can readily discern an enemy's intent. However, the potential requirement to <u>support other instruments of national power</u> demands these disciplines be allocated against non-combatants as well. These collection targets could include regional tribal leaders, religious leaders, host nation security forces, and even the general population. Characterizing⁴⁴ and cataloguing non-combatant data in a central repository⁴⁵ is vital in supporting military activities designed to eliminate combatants using the population as camouflage. Characterizing and cataloging all collected data is resource intensive, but the protracted nature of IW provides copious time to work towards this goal.

Drawing intelligence from the entire demographic presents another key demand in IW. A large number of countries making up the arc of instability are gender segregated societies. The

0211 MOS currently restricts females due to combat exclusionary mandates. Restricting females from the 0211 MOS is a policy decision based on the interpretation of 0211 Marines supporting combat operations. The 0211 MOS however is not the only MOS that provides support to combat units. Nearly all MOSs train to operate in conjunction with ground combat forces and can be task and gender organized to support the assigned mission. Failing to assign females to HUMINT hampers the means to engage with societies where genders are segregated. If HUMINT collection resources only engage with roughly half of the adult population, it undermines the primary intelligence objective in IW: winning the population. It is exceptionally difficult to win over a population if you do not engage the entire demographic.

Open Source Intelligence (OSINT) also plays a particularly important role in IW.

Commanders engaged in IW will be expected to act as a conduit for all instruments of national power when other agency departments are not available. OSINT is a discipline especially pertinent in supporting intelligence demands of these non-kinetic requirements. However, OSINT is not widely respected or employed across the intelligence community. Richard Best's report to Congress identifies a handful of obstacles that hamper the utilization of OSINT. These obstacles include lack of training, lack of internet access, volume of data, need for analytic tools to sort data, redundant media reporting, and restrictive security practices. The Marine Corps faces many of these same obstacles. OSINT lacks a dedicated MOS, and OSINT principles are not taught in any intelligence MOS training pipeline. This lack of advocacy undermines the ability to leverage OSINT within the Marine Corps. The limited OSINT conducted more often enables classified intelligence initiatives rather than serve as a intensive commitment exploiting open sources to satisfy intelligence requirements. Considering Marine Corps intelligence manpower will increase by 5% as part of the 202K initiative, resources are available to enhance

OSINT capability within the force. Appendix K further expounds on the author's recommendations regarding OSINT.

Intelligence Operations and Evidence

IW conflicts will often involve conducting stability and security operations in conjunction with indigenous police and military forces. These local entities are often better suited to keep the peace and administer justice in an ethnically charged, and politically tumultuous environment. This turbulent environment requires an analyst to juggle a multitude of tasks, two of which rise to the forefront. The first involves using intelligence resources to determine the intentions and loyalties of host nation security elements; essentially a background check that should be done periodically to reconfirm loyalties.⁵³ Though this is a sensitive area since trust is an integral element to maintaining long-term relationships, the danger of unintentionally cooperating with highly corrupt individuals or unwittingly harboring enemy insurgents can have devastating effects on accomplishing the mission. A second challenge is orienting the analyst away from conventional thinking (enemy formations and battlespace boundaries) to an outlook focusing on specific individuals and incriminating evidence. Once an individual is captured, either unilaterally or in conjunction with host nation forces, sufficient evidence will be required by the host nation judiciary process to secure long term incarceration. In essence, these operations take on the form of a police detective methodology than that of a traditional intelligence analyst.

Many of the issues warranting intelligence resources do not involve terrorist acts or enemy military actions, but are simply criminal acts (larceny, rape, murder, blackmail etc). It will often require advanced HUMINT and SIGINT techniques to guide small unit forces to capture these disruptive elements, but CLIC actions at the small unit level have a prominent role

to play as well. The MCCLL concluded that "[s]ince confidential sources of information leading to capture of insurgents often will not testify and interrogations in Iraq have seldom led to confessions, physical evidence gathered at the time of capture is key to ensuring insurgents remain in detention.⁵⁴ Incriminating evidence secured during the time of capture is unclassified and provides sufficient means to influence a judiciary process. The CLIC must be able to catalogue evidence from a crime scene and ensure a chain of custody is established. Current methods of conducting sensitive site exploitation vary based on unit SOP and evidence is frequently corrupted as it transitions through processing.

Processing evidence should occur quickly and efficiently. From the outset, a shroud of distrust often exists over U.S. forces and keeping local nationals incarcerated while processing evidence exacerbates this perception. Multi-National Forces-West's Joint Prosecution and Exploitation Center (JPEC) was established in 2006 to address MCCLL identified deficiencies in the areas of document exploitation (DOCEX) and media exploitation (MEDEX) necessary to incarcerate criminals. The JPEC provides a good foundation capable of hastily conducting DOCEX and MEDEX, but the Marine Corps needs to institute these skills into existing MOSs to ensure an organic and reliable capability. Effectiveness in this area has the additional benefit of protecting sources and methods of classified intelligence apparatus. HUMINT and SIGINT tradecraft must be protected from the open nature of a host nation judiciary process or risk becoming ineffectual.

INTELLIGENCE TRAINING

The requirement for intelligence support to non-kinetic lines of operation and the application of non-military forms of national power presents an extremely complex training problem. Predominately, Marine Corps intelligence training is conducted at entry-level MOS

schools and only a handful of mid-career courses including the Marine Analysis and Reporting Course, MAGTF Intelligence Officer's Course, and the MAGTF Intelligence Specialist Career Course exist. The entry-level intelligence trainee normally lacks the maturity and overall familiarity with complex operational concepts necessary to realize the intelligence demands of IW. In addition to this quandary, many skills require refresher training to maintain competence. Some measures exist to assess proficiency (DLPT, Battle Skills Test, etc.), but more often the burden to define proficiency falls on individual units leading to inconsistent training across the Marine Corps.

Establishing regional <u>training centers within the operational forces</u> designed to develop proficiency progressively as well as ensuring currency in specific skills required for upcoming operations provides a potential solution to this problem. These regional training centers would be accountable to Marine Corps Intelligence Schools (MCIS), which would provide the continuity in training necessary to ensure intelligence skills are uniform across the Marine Corps. The MCIS Intelligence Training Enhancement Program (ITEP) is a step in the right direction to provide the operating forces local training to a consistent standard across the Marine Corps. ⁵⁷

In order to be effective and credible, training requires testing and certification. The traditional Marine Corps approach would require an MOS producing school or an additional skill designator. The administrative overhead required to manage either of those options is not supportable. Adopting the aviation "training code" approach to categorize intelligence certifications presents a viable option. In aviation training, the unit certifies individual pilots and crew chiefs to centrally managed standards. Marine Corps aviation requires pilots and crew chiefs to complete specific certifications before they qualify for particular types of missions and each certification requires refreshing at pre-defined intervals to remain current. When one

considers the backbone of the Marine Corps intelligence disciplines (2621, 0211, 0231), it is not realistic to expect these Marines to be proficient at every intelligence task that falls under the IW lexicon. Using the aviation code methodology through regional training institutions will enable consistent training across the operating force. It will also enhance the ability for a unit to specialize in unique skills required for upcoming missions. This approach could also capture competencies in specific cultures as well.

Career Progression to Enhance Skill Development

Mastering an intelligence discipline requires years of sustained commitment and career progression plays a fundamental role in preparing intelligence Marines for IW. Many intelligence skills are perishable and will atrophy if not employed frequently. Whether it is the technical means to collect advanced signals or those necessary to manage human sources or process imagery, it is extremely important to keep Marines within their field of expertise and progressively advance and sustain these skills. In parallel with keeping intelligence Marines in the intelligence field, we also owe it to the Marine and his family to give them an occasional reprieve from the hectic pace associated with operational forces. B Billet⁵⁸ assignments traditionally used to provide this reprieve, but can have detrimental effects on the technical proficiency of intelligence Marines. Establishing cohesive career tracks for each MOS that partner with national intelligence agencies⁵⁹ could both enhance MOS skills and provide a break from the operating forces. One of the most well established examples of this partnership is the relationship between National Security Agency (NSA) and the Marine Cryptologic Support Battalion (MCSB). Marines are able to transition from the operating forces to MCSB where they continue their SIGINT development (language or technical skills) while also getting a reprieve from the operating force optempo.

In addition to increasing MOS proficiency through on the job training opportunities, NSA also offers internships for both officers and enlisted personnel. 60 The training a Marine undergoes during these internships significantly improves the Marine's technical competence while positioning him to train and lead subordinates upon return to the operating force. Other formal education opportunities exist, but lack the throughput to achieve force wide effects. The Company Grade Professionalization Program⁶¹ and the Junior Officer Career Cryptologic Program⁶² are both programs designed for officers to become experts in an intelligence tradecraft. Unfortunately, only two or three officers per year get the opportunity to participate in these programs. The National Defense Intelligence College (NDIC) provides another educational venue for both officer and enlisted personnel. In 2008, the Marine Corps selected 11 enlisted Marines to attend graduate or undergraduate programs at NDIC. These programs are especially useful in increasing technical competence and should be further exploited, but will entail allocating personnel structure to take advantage of these educational programs. Fortunately, the Marine Corps 202K initiative will increase intelligence manpower by 5%. Although these 1200 additional Marines are wholly committed to stabilizing the operating force intelligence units to achieve a 1:2 dwell time ratio, ⁶³ as operational commitments in Iraq and Afghanistan subside it is recommended that personnel structure be apportioned from the operating forces to allow for additional participation in professional internship programs.

Target Demographic to receive Intelligence Training

The growth to 202K Marines presents an opportunity to reform the intelligence personnel pyramid. The Marine Corps has traditionally been a very young force. According to the 2007 Marine Corps Almanac, 42% of the active duty enlisted force is 21 or younger. The demands associated with creating and sustaining the skills required to conduct IW requires an extremely

mature intelligence Marine. That maturity does not necessarily need to be years of experience in intelligence, but years of experience as a Marine. The process to become a 0211 is a good model to demonstrate how manpower pyramids are shifted to ensure the best and brightest are assigned to these duties. Marines are screened for HUMINT/CI as 2nd tour Marines before they are allowed to enter the training program. The increase in personnel across the force provides a distinctive opening to shift the intelligence personnel pyramid to include more NCO and SNCOs vice entry-level programs. Increased focus on drawing in lateral movers can provide a broad talent pool to screen and evaluate for language aptitude in particular. This approach will also potentially draw in savvy, experienced, and career oriented Marines who are more likely to absorb advanced training opportunities than a first term Marine.

CONCLUSIONS

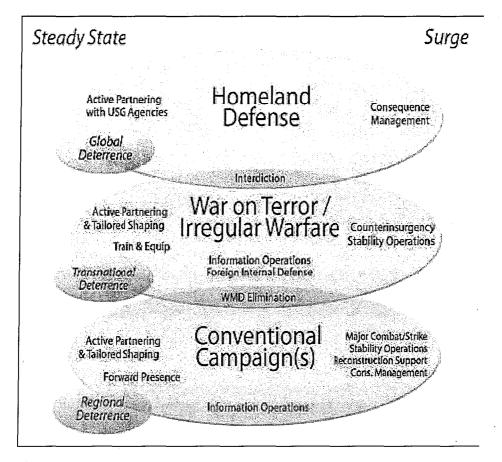
In order to provide intelligence support to IW, the Marine Corps must continue to transform its intelligence capabilities. Fortunately, striving to achieve these initiatives need not detract from the skills required for MCO; rather, achieving this transformation will reinforce the skills required for MCO. From the intelligence perspective, IW is a more complex problem than MCO due to the difficulty in discerning combatants from non-combatants and the intelligence demands associated with other instruments of national power. Previous military doctrine called for forces to train to support MCO in the belief that lesser conflicts would be easier to prosecute, hence MCO was the priority for training. The recent experiences in Iraq and Afghanistan have demonstrated that the subtleties necessary to conduct IW are more complex than those required for MCO. By making intelligence support to IW the focus of effort, the skills developed in the process should satisfy the preponderance of the skills required for MCO.

The most pressing demand for Marine Corps intelligence is to begin establishing relationships with key allies across the arc of instability and expand language skills to encompass all intelligence personnel. As identified in the *Cooperative Strategy for 21st Century Seapower*, "if we are to successfully partner with the international community, we must improve regional and cultural expertise through expanding training, education, and exchange initiatives." This transformation will not occur overnight and demands a daily commitment from the operating forces and the entire supporting establishment to bring to fruition.

Closely <u>aligned with the language</u> initiative, is the necessity to <u>increase the training</u> investment in each Marine. Training Marines to operate in protracted conflicts, fought with coalition partners, spanning a range of kinetic and non-kinetic lines of operation, against an indiscernible enemy is a complex undertaking. This training must <u>span the course of a career, be incremental</u> in level of complexity, and have <u>mechanisms to reflect current competencies</u>. The nature of multiple unit rotations demands that this training be uniform across the Marine Corps, eschews "MEF centric" solutions, and is flexible to adapt to shifting intelligence demands.

Transforming Marine Corps intelligence to address IW is an achievable goal. However, this transformation will involve the cooperation of the entire Marine Corps intelligence community, and will take time to achieve. The solution to IW is investment in human capital and cannot be resolved with a high priced technical solution. Through embracing these principles the Marine Corps intelligence apparatus will be flexible and capable in adapting to future IW conflicts across the arc of instability.

APPENDIX A- THREE PRIMARY PILLARS OF THE DEFENSE STRATEGY



Quadrennial Defense Review (2006), 38

APPENDIX B- SIX POSSIBLE INDICATORS OF LEGITIMACY

- 1. The ability to provide security for the populace.
- 2. Selection of leaders at a frequency and in a manner considering just and fair by a substantial majority of the population.
- 3. A high level of popular participation in or support for political processes.
- 4. A culturally acceptable level of corruption.
- 5. A culturally acceptable level of and rate of political, economic, and social development.
- 6. A high level of regime acceptance by major social institutions.

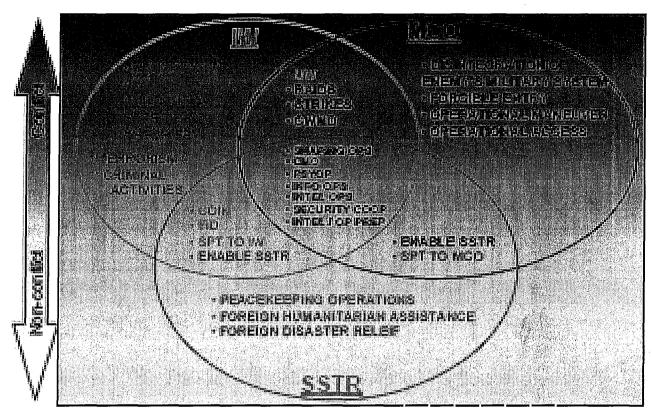
FM 3-24 Counterinsurgency, 1-22.

APPENDIX C- PRIMARY SUPPORTING TASKS FOR IRREGULAR WARFARE

- Conduct strategic communications in support of IW campaign objectives.
- Conduct information operations (operations security, information security, military deception, PSYOP, electronic warfare, computer network attack and defense; and physical destruction) in support of IW campaign objectives.
- Conduct HUMINT network operations in advance of and throughout the IW campaign.
- Collect and exploit information on the situation.
- Produce and/or disseminate intelligence on the situation.
- Conduct counterintelligence operations.
- Provide political-military support to IW.
- Provide security assistance.
- Execute CMO.
- Provide nation assistance to foreign states, organizations, or groups.
- Provide combat and non-combat military training and advisory assistance to the armed forces and other security forces of a foreign state, organization, or group.
- Conduct FID.
- Train selected partners to conduct FID.
- Conduct UW.
- Train selected partners to conduct UW.
- Ensure that forces conducting IW have the ability to control significant land areas.
- Ensure that forces conducting IW have the ability to conduct lethal strike operations.
- Ensure that forces conducting IW have the ability to conduct personnel recovery operations.
- Conduct joint net-centric operations that link globally distributed forces conducting IW.
- Ensure that forces conducting IW have the ability to conduct CWMD operations.
- Provide base support and services to IW operations.

Irregular Warfare Joint Operating Concept, 36.

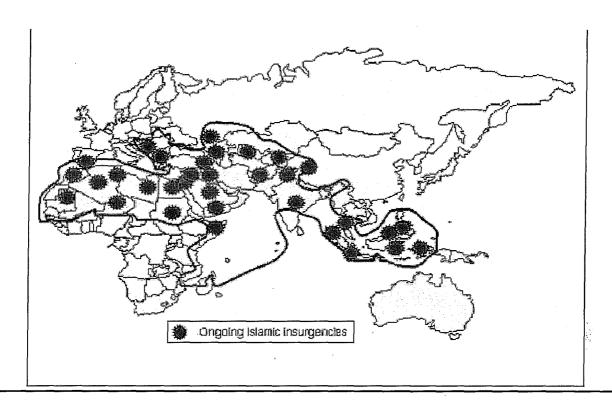
APPENDIX D- RELATIONSHIP BETWEEN IW, SSTR, AND MCO



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Irregular Warfare Joint Operating Concept, 15.

APPENDIX E- ARC OF INSTABILITY



U.S. Department of Air Force, *Air Force Engagement in Expeditionary Operations*, slide 10. http://www.dtic.mil/ndia/2006expwarfare/henabray.pdf

Appendix F - Intelligence Military Occupational Specialty Designations and Descriptions

- <u>0202- MAGTF Intelligence officer-</u> Intelligence officers function as advisors to the commander and assist in carrying out intelligence responsibilities. They formulate plans, policies, and functions pertaining to intelligence operations at all levels.
- <u>0203- Ground Intelligence officer-</u> Ground intelligence officers are trained as the primary platoon commanders in division reconnaissance companies, infantry battalion scout/sniper platoons, and other ground intelligence assignments to include: Battalion, Regiment, and Division Staffs; Force Service Support Groups; and Intelligence Battalions.
- <u>0204- Counterintelligence/ Human Intelligence officer</u>- Duties include serving as CI platoon commander, and company executive officer within the HUMINT company as well as serving as a division or MEF staff officer.
- <u>0206- Signals Intelligence/ Ground Electronic Warfare officer</u>- Signals intelligence/ground electronic warfare (SIGINT/EW) officers command, or assist in commanding a SIGINT/EW unit and/or perform SIGINT/EW officer duties of a technical nature.
- <u>0207- Air Intelligence officer</u>- Air intelligence officers function in a variety of intelligence billets located within the air wing. Billets include targeting officer, collections officer, dissemination officer and S-2 officer of a fixed-wing or rotary wing squadron.
- <u>2691- Signals Intelligence/ Electronic Warfare Chief-</u> Duties of the SIGINT/EW chiefs encompass management and supervision of collection management, the management/deployment of SIGINT assets, and planning for operations/exercises.
- <u>0291- Intelligence Chief-</u> Their responsibilities are to ensure efficient operation of the intelligence section by supervising, instructing, and assisting section personnel in the performance of their duties.
- <u>0205- Tactical Intelligence Officer-</u> Tactical intelligence officers serve in selected internal and external billets, which relate to the planning, collection, analysis, and production of strategic and combat intelligence of a specialized or technical nature.
- <u>0211- Counterintelligence/ HUMINT-</u> Counterintelligence (CI)/HUMINT specialist are created by lateral move from any MOS. They are involved in all facets of planning and conducting CI and human intelligence operations and activities.
- <u>0231- Intelligence Specialist-</u> Intelligence specialists are familiar with all phases and facets of intelligence operations. Typical duties of intelligence specialists involve the collection, recording, analysis, processing, and dissemination of information/ intelligence.
- <u>0241- Imagery Analyst-</u> Imagery Analysis Specialists are accessed by lateral move from any MOS. They process and analyze imagery gathered by various sensor platforms to derive

- intelligence. They use photogrammetric skills to assist the commander in accurate target acquisition and perform reconnaissance mission planning for multi-mission, multi-source imagery reconnaissance.
- <u>0261- Geographic Intelligence Specialist-</u> Geographic intelligence specialists collect, analyze, and process geophysical data.
- <u>2602- SIGINT/ Ground Electronic Warfare Officer-</u> Signals intelligence/ground electronic warfare (SIGINT/EW) warrant officers supervise the tactical and technical employment of SIGINT/ground EW units; provide technical guidance and expertise in SIGINT support to intelligence digital network transmissions, digital network defense, and digital network exploitation; provide technical guidance in the processing and reporting of information; and supervise the operations of the Tactical Electronic Reconnaissance Processing and Evaluation System (TERPES) within the VMAQ squadrons.
- <u>2611- Cryptologic Digital Network Technician/ Analyst</u>- Digital network technicians are involved in all facets of planning and conducting digital network collection, analysis and reporting.
- <u>2621- Special Communications Signals Collection Operator/ Analyst</u>- Special communications signals collection operators/analysts exploit every phase of communications to include the intercept and analysis of electronic communications signals along with digital network systems.
- <u>2629- Signals Intelligence Analyst-</u> Signals intelligence analysts' duties encompass all facets of signals intelligence analysis and supervision of selected collection and EW/COMSEC operations.
- <u>2631- Electronic Intelligence (ELINT) Intercept Operator/Analyst-</u> ELINT intercept operators/analysts duties encompass all facets of ELINT transmissions intercept and analysis including installation, operation, and preventive maintenance of associated equipment.
- <u>2651- Special Intelligence Systems Administrator/ Communicator-</u> Special intelligence communicators' duties encompass all aspects of special intelligence communications including the utilization of equipment.
- <u>2671- Middle East Cryptologic Linguist-</u> Cryptologic linguists monitor, transcribe, and translate intercepted target communications; perform analysis and exploitation of designated foreign communications; and install, operate, and perform preventive maintenance of intercept equipment.
- <u>2673- Asia-Pacific Cryptologic Linguist-</u> Cryptologic linguists monitor, transcribe, and translate intercepted target communications; perform analysis and exploitation of designated

foreign communications; and install, operate, and perform preventive maintenance of intercept equipment.

<u>2674- European I (West) Cryptologic Linguist-</u> Cryptologic linguists monitor, transcribe, and translate intercepted target communications; perform analysis and exploitation of designated foreign communications; and install, operate, and perform preventive maintenance of intercept equipment.

2676- European II (East) Cryptologic Linguist- Cryptologic linguists monitor, transcribe, and translate intercepted target communications; perform analysis and exploitation of designated foreign communications; and install, operate, and perform preventive maintenance of intercept equipment.

HQMC Intelligence Department official web page and MCO P1200.6- MOS Manual, http://hqinet001.hqmc.usmc.mil/DirInt/Formal_Schools/schools_MOS.html

Appendix G- Resident Language Programs Offered at DLI with DLAB prerequisites

Program	Weeks	Prerequisite(s)
ARABIC		
Basic	63	DLAB: 100
Intermediate	47	DLPT: L2/R or S2
Advanced	47	DLPT: L2+/R or S2+
Sustainment	2	DLPT: L1+/R1+
Refresher	20	DLPT: L1+/R1+
CHINESE (Mandarin)		,
Basic	63	DLAB: 100
Intermediate	47	DLPT: L2/R or S2
Advanced	47	DLPT: L2+/R or S2+
FRENCH		
Basic	25	DLAB: 85
Intermediate	18	DLPT: L2/R or S2
Advanced	18	DLPT: L2+/R or S2+
GERMAN		
Basic	34	DLAB: 90
Intermediate	26	DLPT: L2/R or S2
Advanced	26	DLPT: L2+/R or S2+
Special (scientist)	24	None
Extended (Le Fox)	20	DLPT: L2/R2/S2
Sustainment	2	DLPT: L1+/R1+
Refresher	12	DLPT: L1/R1
GREEK		
Basic	47	DLAB: 95
Intermediate	36	DLPT: L2/R or S2
Advanced	36	DLPT: L2+/R or S2+
Refresher	16	DLPT: L1/R1
HEBREW		
Basic	47	DLAB: 95

Intermediate	36	DLPT: L2/R or S2
Advanced	36	DLPT: L2+/R or S2+
ITALIAN		
Basic	25	DLAB: 85
Intermediate	18	DLPT: L2/R or S2
Advanced	18	DLPT: L2+/R or S2+
Refresher	8	DLPT: L1/R1
JAPANESE		
Basic	63	DLAB: 100
Conversational	24	DLAB: 100
Intermediate	47	DLPT: L2/R or S2
Advanced	47	DLPT: L2+/R or S2+
Refresher	20	DLPT: L1+/R1+
KOREAN		
Basic	63	DLAB: 100
Gateway	8	none
Intermediate	47	DLPT: L2/R or S2
Advanced	47	DLPT: L2+/R or S2+
Sustainment	2	DLPT: L1+/R1+
Refresher	20	DLPT: L1+/R1+
KURDISH		DLAB:
PASHTO		
Basic	47	DLAB: 95
PERSIAN (Dari)		
Basic	47	DLAB: 95
Conversion	16	DLPT: L2/R2 in PF
PERSIAN (Farsi)		
Basic	47	DLAB: 95
Intermediate	36	DLPT: L2/R or S2
Advanced	36	DLPT: L2+/R or S2+
Sustainment	2	DLPT: L1+/R1+

Refresher	16	DLPT: L1+/R1+
PORTUGUESE		
Basic	25	DLAB: 85
Intermediate	18	DLPT: L2/R or S2
Advanced	18	DLPT: L2+/R or S2+
Refresher	8	DLPT: L1/R1
RUSSIAN		
Basic	47	DLAB: 95
Intermediate	36	DLPT: L2/R or S2
Advanced	36	DLPT: L2+/R or S2+
Special	8	01GM
Extended (Le Fox)	28	DLPT: L2/R2/S2
Sustainment	2	DLPT: L1+/R1+
OSIA	33	DLPT: L2/R2
SERBIAN/CROATIAN		
Basic	47	DLAB: 95
Cross-training	16	DLPT: L2/R2 (in Russian or Czech)
SPANISH		
Basic	25	DLAB: 85
Intermediate	18	DLPT: L2/R or S2
Advanced.	18	DLPT: L2+/R or S2+
Special (Law Enf)	10.5	none
Sustainment	2	DLPT: L1+/R1+
Refresher	8	DLPT: L1/R1
TAGALOG (FILIPINO)		
Basic	47	DLAB: 95
Intermediate	36	DLPT: L2/R or S2
Advanced	36	DLPT: L2+/R or S2+
Refresher	16	DLPT: L1+/R1+
THAI		
Basic	47	DLAB: 95

Intermediate	36	DLPT: L2/R or S2
Advanced	36	DLPT: L2+/R or S2+
Refresher	16	DLPT: L1+/R1+
TURKISH		
Basic	47	DLAB: 95
Gateway	8	none
Intermediate	36	DLPT: L2/R or S2
Advanced	36	DLPT: L2+/R or S2+
Refresher	16	DLPT: L1+/R1+
UZBEK		
Basic	47	DLAB: 95
VIETNAMESE		
Basic	47	DLAB: 95
Intermediate	36	DLPT: L2/R or S2
Advanced	36	DLPT: L2+/R or S2+
Refresher	16	DLPT: L1+/R1+

http://www.dliflc.edu/Academics/academic_affairs/dli_catalog/resident.htm

Appendix H- Defense Language Proficiency Test (DLPT) Skill-Level Descriptions

The DLPT assesses an individual's competence in listening, reading, speaking, and writing. The categories are incremental with 0 equating to zero proficiency and 5 equating to native equivalent with a plus caveat to gauge progress within the current level.

<u>Skill Level</u>	Equated Proficiency
0	No Proficiency
0+	Memorized Proficiency
1	Elementary Proficiency
1+	Elementary Proficiency, Plus
2	Limited Working Proficiency
2+	Limited Working Proficiency, Plus
3	General Professional Proficiency
3+	General Professional Proficiency, Plus
4	Advanced Professional Proficiency
4+	Advanced Professional Proficiency, Plus
5	Functional Native Proficiency

Examples in Listening category:

Level 0 - No practical understanding of the spoken language. Understanding is limited to occasional isolated words with essentially no ability to comprehend communication.

Level 1- Sufficient comprehension to understand utterances about basic survival needs and minimum courtesy and travel requirements. In areas of immediate need or on very familiar topics, can understand simple questions and answers, simple statements, and very simple face-to-face conversations in a standard dialect.

Level 2- Sufficient comprehension to understand conversations on routine social demands and limited job requirements. Able to understand face-to-face speech in a standard dialect, delivered at a normal speaking rate with some repetition and rewording, by a native speaker.

Level 3- Able to understand the essentials of all speech in a standard dialect, including technical discussions within a special field. Has effective understanding of face-to-face speech, delivered with normal clarity and speed in a standard dialect, on general topics and areas of special interest; understands hypothesizing and supported opinions.

Level 4- Able to understand all forms and styles of speech pertinent to professional needs. Able to understand fully all of speech with extensive and precise vocabulary, subtleties, and nuances in all standard dialects on any subject relevant to professional needs within the range of his experience, including social conversations; all intelligible broadcasts and telephone calls; and many kinds of technical discussions and discourse.

Level 5- Comprehension equivalent to that of the well-educated native listener. Able to understand fully all forms and styles of speech intelligible to the well-educated native listener, including a number of regional and illiterate dialects, highly colloquial speech and conversations, and discourse distorted by marked interference from other noise.

*Information extracted from Defense Language Institute on-line resources. Additional skill level details can be found at the link directly below.

http://www.dliflc.edu/Academics/academic_affairs/dli_catalog/skill.htm

APPENDIX I- CENSUS FORM



CLIC Training ... Basic Analysis Toolkit Census Collection Forms (used by A/1/24 OIF 05-07.02)



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USMC CLIC Overview Brief to MCIS (MCIS - Maj JD Heye) 07121

UNCLAS // FOUC

Marine Corps Intelligence Schools, *Company Level Intelligence Cells* (Damneck VA, 12 December 2007), slide 40.

APPENDIX J- EQUIPPING THE FORCE FOR IW

Long Duration, complex operations involving the U.S. military, other government agencies and international partners will be waged simultaneously in multiple countries around the world, relying on a combination of direct (visible) and indirect (clandestine) approaches. Above all, they will require persistent surveillance and vastly better intelligence to locate enemy capabilities and personnel. 66 -Quadrennial Defense Review (2006).

One of the advantages IW has over conventional conflicts is that the environment allows intelligence professionals to delve deeply into the target from a static position over an extended period of time. This relatively static posture allows for a more elaborate intelligence collection apparatus to be established. Intelligence collection tools designed for IW can be heavier and employ more electricity than conventional or expeditionary operations. These attributes traditionally have a negative connotation when discussing system solutions. The Marine Corps' amphibious and expeditionary heritage encourages small, light weight, battery powered solutions which are functional in IW environments, but not as well as the situation allows. Equipment solutions should be scalable in order to capitalize on static profiles permissible in IW, but also transition to lighter and mobile packages to support amphibious and expeditionary operations.

Creating persistent ISR is the objective of the collection architecture. In conventional conflicts keeping this architecture as clandestine as possible is encouraged, but IW conflicts may warrant a different strategy. When friendly force units are engaged in stability operations, maintaining a portion of sensors in an overt collection posture can have the additional benefit of acting as a deterrent to criminal or terrorist behavior. The MCCLL attributed a drop in Husaybah Iraq crime rates with the recent installation of overt surveillance cameras. This type ISR acts as a deterrent, as well as allows post event reconstruction when attacks occur. Ad hoc solutions that take advantage of this environment include both the Prophet Hammer system and

the Ground Based Operational Surveillance System (G-BOSS). Many intelligence demands will be reactive in nature because of the enemy's natural ability to hide within the population. Having the means to save massive quantities of data in order to conduct post event reconstruction using SIGINT and IMINT allow analysts to identify key discriminators associated with the target. These discriminators coupled with a persistent ISR architecture will increase the means to prevent future attacks employing similar techniques or resources (cars, profiles, etc) as well as provide evidence once the insurgent or terrorist is captures.

Persistent imagery ISR plays a very significant role when working with a host nation government. In the case of Iraq, judges have a tendency to require overwhelming physical evidence in order to keep an insurgent or terrorist incarcerated. Providing an image of an individual perpetrating a crime is indisputable and is often releasable at the unclassified level. Persistent ISR also has a role when the Marine Corps lacks host nation support. The 2006 QDR identified the requirement for persistent surveillance capable of loitering in both denied or contested areas as a key capability for the future force.

The G-BOSS system is particular well suited for IW environments. The design of the system enables tactical units to scan and observe their area of operations and offers sufficient play back that event reconstruction is viable provided the camera was looking in the right place. The key component we must tackle is multiple "eyes" with overlapping coverage.

Unmanned Aerial Systems (UAS) are another system especially important in IW. The MCCLL determined that "[t]he traditional target intelligence cycle and conventional ISR platforms were relatively ineffective in supporting the application of MEF fires against the emerging paramilitary threat. However, UAV assets and HUMINT emerged as more effective

tools in the conduct of time sensitive targeting against unconventional threats."⁷² Additional UAS need to be available to support small unit ISR requirement and next generation technology should expand to include modular sensors. Blending multiple-intelligence sensors on the same platform will enhance intelligence fusion times over current methods which are more stovepiped. The Army's recent operational success involving Task Force Odin is a stellar example of this concept. Since November 2006, this 100-man task force employed UAVs, manned IMINT platforms, and MASINT processing techniques to kill more than 2400 insurgents in the process of planting IEDs.⁷³ This blending of Coherent Change Detection (CCD) methods combined with a responsive airborne quick reaction force is an excellent model for the Marines Corps to study and emulate. To match this success, the Marine Corps must dramatically enhance UAS and manned imagery capabilities as well as master MASINT CCD skill sets.

In conclusion, multi-intelligence capable UASs employed in tandem with ground based persistent ISR solutions are ideal for IW environments. The static profiles associated with IW operating profiles allow unique flexibility in deploying solutions that require significant electricity and exceed traditional weight thresholds. These variables can provide additional capacity for collection and storage which thereby enables post event reconstruction. Intelligence derived from persistent ISR that can be stored for a significant amount of time provides the MAGTF an extremely capable resource in preventing criminal and terrorist acts as well as incarcerating those individuals responsible for criminal acts.

APPENDIX K- HARNESSING OPEN SOURCE INTELLIGENCE

Open-Source Intelligence (OSINT) is valuable for understanding the operational environment. It is often more useful than any other discipline for understanding public attitudes and public support for insurgents and counterinsurgents. OSINT is also an important means of determining the effectiveness of IO.⁷⁴ FM3-24 Counterinsurgency

HUMINT, IMINT, and SIGINT are well established disciplines that have natural advocates within the Marine Corps through dedicated MOS assignments.⁷⁵ Unfortunately OSINT lacks this same advocacy and is therefore less prominent in the intelligence process. All intelligence personnel routinely use open sources, but rarely is it done for the deliberate purpose of gathering OSINT. Open sources are usually employed to assist other classified intelligence operations. IW environments allow considerable access to indigenous open source information. In many cases there will be a semi or dysfunctional government with information archives, multiple media outlets, and a surplus of other open source resources available for analysis. Dedicating personnel exclusively to data-mine and analyze this information is crucial to framing the problem.

One of the largest benefits of OSINT is the efficiency it can bring to other intelligence operations by identifying what is, in fact, a secret and requires the commitment of limited collection assets. An emphasis on OSINT early in a campaign can help in several areas. First it helps define the political landscape and issues important to the local populace. Secondly, it can orient the MAGTF to what things are expressly not discussed in open sources and guide organic ISR to fill in the gaps. This is a distinctly different approach than is commonly taken with OSINT, but will likely provide better long term results.

Conducting OSINT in the native language should always be the preferred method of exploitation. Reading English versions of local media fail to capture what is intended for the local population. Fortunately, this is an area where the Marine Corps can supplement organic capability by employing host nation personnel due to OSINT's unclassified nature. Translating newspapers, transposing local sermons, assessing government census documents, listening to radio stations and capturing local pundit opinions can be crucial in mapping out the human terrain which in turn can guide organic and classified collection capabilities and priorities.

OSINT does have limitations. It will rarely provide insights into enemy tactical plans and intentions. The exception to this would be enemy use of chat rooms, web logs (BLOGs), and internet postings to coordinate operations. These same tools are more likely to be used as a conduit to drive their information strategy with the local population as the target audience. Considering that the enemy is also competing for the support of the population conducting OSINT has the potential to provide the strategic vision of the enemy organization which is required to devise strategies to disrupt it. Irregular foes will use media as a resource to execute their campaign plan. Failure to keep a detailed awareness of enemy information strategies will undermine application of national power of all types.

Establishing a central OSINT capability to serve Marine Corps intelligence requirements would significantly enhance the IW intelligence architecture. Centrally organizing this capability maximizes its ability to support multiple geographically disparate operations.

Centralized intelligence production is often maligned due to lack of timeliness and situational awareness. Both of these factors are negligible with OSINT because it rarely services tactical or time sensitive requirements. The recent expansion of civilian positions at the Marine Corps

Intelligence Activity (MCIA) provides an opportunity to satisfy this requirement. Assembling a dedicated OSINT cell designed to satisfy MAGTF intelligence requirements would offset the burden to the operating forces of taking it on as a secondary intelligence task and in so doing provide the attention necessary to ensure it is rigorously pursued. MCIA is already familiar with integrating OSINT into the all-source process 77 so expanding this capacity to include language capabilities and subject matter experts would not be a major deviation in their existing mission. A central organization of this type could maximize language capabilities as well as subject matter expertise required to interpret the translated product.

Although the preponderance of OSINT research can be done through federated processes the need to overlay local situational awareness will always remain. Any OSINT cell should be organized to provide deployable liaison officers to ensure requirements are properly understood, prioritized, and fulfilled to the MAGTF commander's satisfaction. MCIA is better prepared than the operating forces as well as has the means to hire civilians to satisfy IW OSINT demands. This arrangement provides a unique opportunity to entice personnel not suitable for military service, but with quality language skills or subject matter expertise to be brought to bear in support of the Marine Corps OSINT efforts.

ACRONYMS

CI- Counterintelligence

CI/HUMINT- Counterintelligence/ Human Intelligence

CIHEP- Counterintelligence HUMINT Equipment Program

CIA- Central Intelligence Agency

COIN- Counterinsurgency

DCGS-MC- Distributed Common Ground Surface System Marine Corps

DIA- Defense Intelligence Agency

DLI- Defense Language Institute

DO- Distributed Operations

DOCEX- Document Exploitation

DoD-Department of Defense

EW-Electronic Warfare

GEOINT- Geospatial Intelligence

G-BOSS- Ground Based Operational Surveillance System

GWOT- Global War on Terrorism

HQMC- Headquarters Marine Corps

HUMINT- Human Intelligence

IMINT- Imagery Intelligence

IO- Information Operations

IPB- Intelligence Preparation of the Battlespace

ISB- Intelligence Support Battalion

ISR- Intelligence Surveillance and Reconnaissance

IW- Irregular Warfare

JOCCP- Junior Officer Career Cryptologic Program

JPEC- Joint Prosecution and Exploitation Center

MAGTF- Marine Air Ground Task Force

MASINT- Measurement and Signature Intelligence

MCIA- Marine Corps Intelligence Activity

MCIS- Marine Corps Intelligence Schools

MCISR-E- Marine Corps Intelligence Surveillance and Reconnaissance Enterprise

MCO- Major Combat Operations

MCSB- Marine Cryptologic Support Battalion

MEDEX- Media Exploitation

MEF- Marine Expeditionary Force

MOS- Military Occupational Specialty

NSA- National Security Agency

OSINT- Open Source Intelligence

RREP- Radio Reconnaissance Equipment Program

SCI- Sensitive Compartmented Information

SIGINT- Signals Intelligence

UAS- Unmanned Aerial System

UAV- Unmanned Aerial Vehicle

GLOSSARY

All-Source Intelligence- Intelligence products and/or organizations and activities that incorporate all sources of information, most frequently including human resources intelligence, geospatial intelligence, measurement and signature intelligence, signals intelligence and open source data in the production of finished intelligence. (ISR Roadmap)

Battle Damage Assessment- The timely and accurate estimate of damage resulting from the application of military force, either lethal or non-lethal against a predetermined objective. (ISR Roadmap)

Counterintelligence- Information gathered and activities conducted to protect against espionage, other intelligence activities, sabotage, or assassinations conducted by or on behalf of foreign governments of elements thereof, foreign organizations, or foreign persons, or international terrorist activities. (ISR Roadmap)

Counterinsurgency- Those military, paramilitary, political, economic, psychological, and civic actions taken by a government to defeat insurgency (JP 1-02)

Culture- The customary beliefs, social forms, and material traits of a racial, religious, or social group. (Webster's)

Cultural Intelligence- All-Source analysis of individuals and group beliefs, customs and norms for the purpose of anticipating a persons or groups actions. Support operational planning by providing the cultural terrain of the environment. (MCIA)

Defense Language Aptitude Battery (DLAB)- is a test used by the <u>United States Department</u> of <u>Defense</u> to test an individual's potential for learning a foreign language. It is used to determine who may pursue training as a military linguist. It consists of 126 multiple-choice questions, and the test is scored out of a possible 176 points. The first half of the test is audio, and the second half is written. The test does not attempt to gauge a person's ability in a language, but rather to determine their ability to learn a language. To qualify to pursue training in a language, one needs a minimum score of 95. (Wikipedia)

Document Exploitation- The exploitation of captured enemy documents for potential intelligence value. (MCCLL)

Electronic Intelligence- Technical and geolocational intelligence derived from foreign non-communications electromagnetic radiations emanating from other than nuclear detonations or radioactive sources. (ISR Roadmap)

Electronic Warfare- Any military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. (ISR Roadmap)

Geospatial Intelligence- The exploitation and analysis of imagery and geospatial information to describe, assess, and visually depict features and geographically referenced activites on the earth. Geospatial intelligence consists of imagery, imagery intelligence, and geospatial information. (ISR Roadmap)

G-BOSS- The G-BOSS System of Systems concept is to integrate command and control; commercial off the shelf and government off the shelf sensors to ground, airborne, and space-based platforms. The military objective of G-BOSS is to detect, identify, and track insurgent activities, specifically associated with the emplacement of IEDs. (LtGen Magnus testimony to congress)

Human Intelligence- Intelligence derived from the intelligence collection discipline that uses human beings as both sources and collectors, and where the human being is the primary collection instrument. (ISR Roadmap)

Imagery Intelligence- Intelligence derived from the exploitation of collection by visual photography, infrared sensors, lasers, electro-optics, and radar sensors such as synthetic aperture radar wherein images of objects are reproduced optically or electronically on film, electronic display devices, or other media. (ISR Roadmap)

Intelligence- The product resulting from the collection, processing, integration, analysis, evaluation, and interpretation of available information concerning foreign countries or areas. Also includes information and knowledge about an adversary obtained through observation, investigation, analysis, or understanding. (ISR Roadmap)

Intelligence Preparation of the Battlespace- An analytical methodology employed to reduce uncertainties concerning the enemy, environment, and terrain for all types of operations. (ISR Roadmap)

Intelligence Requirement- Any subject, general or specific, upon which there is a need for the collection of information or the production of intelligence. (ISR Roadmap)

Intelligence Surveillance and Reconnaissance- An activity that synchronizes and integrates the planning and operation of sensors, assets, and processing, exploitation, and dissemination systems in direct support of current and future operations. This is an integrated intelligence and operations function. (JP 2-01)

Irregular Warfare- A violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s). Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other capacities, in order to erode an adversary's power, influence, and will. (JP 1)

Line of Operations- A logical line that connects actions on nodes and/or decisive points related in time and purpose with an objective. (JP 1-02)

Measurement and Signals Intelligence- A system for the management of theater and national measurement and signature intelligence (MASINT) collection requirements. It provides automated tools for users in support of submission, review, and validation of MASINT nominations of requirements to be tasked for national and Department of Defense MASINT collection, production, and exploitation resources. (JP 2-01)

Media Exploitation- The exploitation of seized media equipment for potential intelligence value. (MCCLL)

Peer Competitor- A global peer competitor is a nation or rival coalition with the motivation and capabilities to contest U.S. interests on a global scale (DoD)

Personnel Tempo- The time a service member is deployed.

Predator- Medium Altitude Unmanned Aerial Vehicle (ISR Roadmap)

Pioneer- Tactical Unmanned Aerial Vehicle (ISR Roadmap)

Open Source Intelligence- Information of potential intelligence value that is available to the general public (JP 1-02)

Operating tempo- The annual operating miles or hours for the major equipment system in a battalion-level or equivalent organization. Commanders use operating tempo to forecast and allocate funds for fuel and repair parts for training events and programs (FM 7-0)

Operational Environment- A composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander. (JP 1-02)

Signals Intelligence- A category of intelligence comprising either individually or in combination all communications intelligence, electronic intelligence, and foreign instrumentation signals intelligence, however transmitted. 2. Intelligence derived from communications, electronic, and foreign instrumentation signals. (JP 2-0)

Definitions primarily derived from Joint and Marine Corps documents, but also include author's definitions when either Joint or Marine Corps publications did not suffice to define the word.

Notes

¹ U.S. Department of Defense, *Quadrennial Defense Review* (February 6, 2006), 36.

² U.S. Department of Defense, *Quadrennial Defense Review* (February 6, 2006), 37.

³ U.S. Department of Defense, *Irregular Warfare (IW) Joint Operating Concept (JOC) Version 1.0*, September 11, 2007, 8.

⁴ The Marine Corps Intelligence Community is a term used to encompass operating force and supporting establishment units that collectively support Marine Corps operations. The operating force units traditionally provide actionable intelligence to MEF and subordinate elements. The primary operating force units include Radio Battalions, Intelligence Battalions, Unmanned Aerial Vehicle (VMU) Squadrons and Reconnaissance Battalions. It also includes intelligence sections associated with battalions and squadrons assigned within a MEF. The supporting establishment is responsible for actions that include equipment procurement, manpower management, MOS certification, support to other National agencies and doctrine development. Key supporting establishment elements relevant to this paper include Marine Cryptologic Support Battalion (MCSB), Marine Corps Intelligence Activity (MCIA), Marine Corps Intelligence Schools (MCIS), Headquarters Marine Corps Intelligence Department, Marine Corps Combat Development Command (MCCDC), and Marine Corps Systems Command (MCSC). The Intelligence Surveillance and Reconnaissance Roadmap (ISR) is a foundation document that defines operating force and supporting establishment roles within the construct.

⁵ U.S. Department of the Army, and Headquarters U.S. Marine Corps, *Counterinsurgency*. FM3-24 or MCWP 3-33.5 (Washington, DC: U.S. Department of the Army, December 2006), 1-21.

⁶ U.S. Department of Defense, Quadrennial Defense Review (February 6, 2006), 86.

⁷ U.S. Department of Defense, *Irregular Warfare (IW) Joint Operating Concept (JOC)*, September 11, 2007, 6.

⁸ Dell Dailey, "An 'All elements of power' strategy for combating terrorism" *Washington Institute for Near East Policy*. Policy Watch # 1321. Dec 18, 2007.

⁹ United States Marine Corps, Small Wars Manual, (1940), 1.

¹⁰ U.S. Department of Defense, *Irregular Warfare (IW) Joint Operating Concept (JOC) Version* 1.0, September 11, 2007, 29.

¹¹ U.S. Department of Defense, Quadrennial Defense Review (February 6, 2006), 29.

¹² DoDD 3000.05, Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations, 2.

¹³ Ibid, 2.

¹⁴ U.S. Department of Defense, *Irregular Warfare (IW) Joint Operating Concept (JOC) Version* 1.0, September 11, 2007, 10.

¹⁵ National Military Strategy, 5.

¹⁶ U.S. Department of Defense, *Quadrennial Defense Review* (February 6, 2006), VI

¹⁷ Commandant of the Marine Corps, Chief of Naval Operations, and Commandant of the Coast Guard, *A Cooperative Strategy for 21st Century Seapower* (October 2007), A-4.

¹⁸ Ibid, A-5.

¹⁹ Richard A. Best, *Intelligence Issues for Congress*, CRS Report for Congress RL 33539 (Washington, DC: Congressional Research Service, December 18, 2007), 1.

²⁰ Marine Corps Center for Lessons Learned, *Intelligence and Surveillance Related Lessons from the Global War on Terrorism*, (September 9, 2005), 2.

²¹ Ibid, 2.

²² Federation of American Scientists, PDD-35-Intelligence Requirements (March 2, 1995), http://www.fas.org/irp/offdocs/pdd35.htm

²³ Russell Harris, email message to author, January 31, 2008.

²⁴ Russell Harris, email message to author, January 31, 2008.

²⁵ The Defense Language Aptitude Battery is a series of tests designed to assess the potential for a candidate to learn a language.

²⁶ Matthew Reiley, "Transforming SIGINT to Fight Irregular Threats," American Intelligence Journal, April 2008.

²⁷ Commandant of the Marine Corps, *Foreign Language Proficiency Pay Program*, MCO 7220.52E, June 1, 2006.

²⁸ U.S. Department of Defense, *Quadrennial Defense Review* (February 6, 2006), 78.

- ²⁹ Headquarters Marine Corps, Intelligence Department. *Selected Marine Corps Reserve*, *Intelligence Support Battalion*. http://hqinet001.hqmc.usmc.mil/dirint/mcrip/default.asp?page=121 (accessed April 9, 2008).
- ³⁰ Commandant of the Marine Corp, Chief of Naval Operations, and Commandant of the Coast Guard, *A Cooperative Strategy for 21st Century Seapower* October 2007), A-7.
- ³¹ Documents include National Security Strategy, National Defense Strategy, National Military Strategy, Quadrennial Defense Review, 21st Century Seapower, Marine Corps 21.
- ³² Andrew Weis, email message to author, January 15, 2008.
- ³³ Marine Corps Center for Lessons Learned, *Intelligence enhancements in the Infantry Battalion: Producing Actionable Tactical Information* (May 21, 2007), 2.
- ³⁴ Morgan Mann, "Census Operations and Information Management," *Marine Corps Gazette* (April 2006), 24.
- ³⁵ Mark Moyer, *Phoenix and the Birds of Prey* (University of Nebraska Press, 1997), 37,84,146.
- ³⁶ Marine Corps Center for Lessons Learned, *Intelligence Enhancements in the Infantry Battalion: Producting Actionable Tactical Information* (May 21, 2007), 5.
- 37 Maj Heye, Company Level Intel Cells overview to TECOM G-3, 8.
- ³⁸ Marine Corps Intelligence Schools, *Annual Report 2008*, (Damneck VA, March 15, 2008), 2.
- ³⁹ Marine Corps Center for Lessons Learned, *Intelligence and Surveillance Related Lessons from the Global War on Terrorism* (September 9, 2005), 4.
- ⁴⁰ Mark Moyer, *PHOENIX AND THE BIRDS OF PREY: Counterinsurgency and Counterterrorism in Vietnam* (University of Nebraska Press, 2007), 371.
- ⁴¹ Ibid, 371.
- ⁴² U.S. Department of the Army, *Counterinsurgency*. FM3-24 (also published as MCWP 3-33.5) (Washington, DC: U.S. Department of the Army, December 2006), 1-23.
- ⁴³ NGA defines persistent surveillance as "assured monitoring of entities and environment with sufficient frequency, continuity, accuracy, precision, spectral diversity, and data content to obtain desired information, even in the presence of denial and deception."
- ⁴⁴ Characterizing in this context means to determine name, ethnicity, occupation, primary affiliates, and attitude towards the insurgents, government, or US forces.

- ⁴⁷ Center for Military Readiness Policy Analysis, "Women in Land Combat," CMR Report, Number 16 (April 2003), 3.
- ⁴⁸ Richard A. Best, *Open Source Intelligence (OSINT): Issues for Congress, CRS Report for Congress RL 34270* (Washington DC: Congressional Research Service, December 5, 2007), 1.

- ⁵² Headquarters Marine Corps Intelligence Department, Draft DCGS-MC Input for ISR Roadmap, 2.
- ⁵³ Committing intelligence resources to assess the allegiances and level of corruption of cooperating police and military forces is essential. A pitfall associated with this process is employing western standards that may not be applicable to that society.
- ⁵⁴ Marine Corps Center for Lessons Learned, *Intelligence Exploitation of Enemy Material* (20 June 2006), 4.

- ⁵⁶ Marine Corps Intelligence Schools, *Combined MOS slicksheets*, (Damneck VA), Slide 8 and 28.
- ⁵⁷ Marine Corps Intelligence Schools, *Intelligence Training Enhancement Program (ITEP) Overview*, 1.
- ⁵⁸ Traditional B Billet assignments include recruiting, drill instructor duty, Marine Security Guard and other occupations where a Marine is removed from their primary MOS.
- ⁵⁹ These national intelligence agencies would include the National Security Agency, Central Intelligence Agency, National Geospatial Agency, Defense Intelligence Agency, and National Reconnaissance Office.

⁴⁵ This repository must centrally store census information as well as classified intelligence gathered by various disciplines. Central storage is essential to enable individual units with unique intelligence requirements to pull data relevant specifically to their area of operations. This access in conjunction with their situational awareness set conditions for decisive operations at the small unit level.

⁴⁶ Training and Education Command. 0211 MOS Roadmap. 2.

⁴⁹ Ibid, 9.

⁵⁰ Appendix F identifies Military occupational Specialties derived from MCO P1200.6.

⁵¹ Marine Corps Intelligence Schools, *Combined Slick Sheets*, 1-40.

⁵⁵ Ibid, 7.

- ⁶⁰ Commandant of the Marine Corps, FY 2009 National Security Agency (NSA) Cryptologic Intern Programs, MARADMIN 058/08, January 18, 2008.
- ⁶¹ Commandant of the Marine Corps. *Company Grade Professionalization Program*. MARADIN 019/08, January 9, 2008.
- ⁶² Commandant of the Marine Corps, *Junior Officer Career Cryptologic Officer Program.* MARADIN 020/08, January 9, 2008.
- ⁶³ Headquarters U.S. Marine Corps, Intelligence Department, *DCGS-MC Input for ISR Roadmap*, 2.
- ⁶⁴ United States Marine Corps, Concepts and Programs, 231.
- ⁶⁵ Commandant of the Marine Corps, Chief of Naval Operations, and Commandant of the Coast Guard, *A Cooperative Strategy for 21st Century Seapower* (October 2007), A-10.
- ⁶⁶ U.S. Department of Defense, Quadrennial Defense Review (February 6, 2006), 23.
- ⁶⁷ Marine Corps Center for Lessons Learned, *Intelligence Capability Enhancements, OIF Infantry Battalions, Operation METRO* (4 January 2007), 3.
- ⁶⁸ Prophet Hammer is a system provided by the U.S. Army through partnership with NSA that is static and tied into the National Intelligence architecture through High Bandwidth communications.
- ⁶⁹ The G-BOSS is a Marine Corps commercial off the shelf system designed to observe IED emplacement activity.
- ⁷⁰ Marine Corps Center for Lessons Learned, *Intelligence Exploitation of Enemy Material* (June 20, 2006), 9.
- ⁷¹ U.S. Department of Defense, *Quadrennial Defense Review* (February 6, 2006), 31.
- ⁷² Marine Corps Center for Lessons Learned, *Intelligence and Surveillance Related Lessons from the Global War on Terror* (9 September 2005), 6.
- ⁷³ Kris Osborn, "U.S. Aviators, UAVs Team up Against IEDs. After Iraq Success, Army Takes Tactics to Afghanistan," Defense News, January 21, 2008.
- ⁷⁴ U.S. Department of the Army, *Counterinsurgency*. FM3-24 (also published as MCWP 3-33.5) (Washington, DC: U.S. Department of the Army, December 2006), 3.28.

 $^{^{75}}$ 0206/26XX, 0204/0211, and 0241/0261 are the specific MOSs that coincide with intelligence disciplines.

⁷⁶ MCIA is expanding civilian personnel structure from 141 to 189 by 2010 according to Steve Foster at MCIA.

⁷⁷ Marine Corps Intelligence Activity, *Command Brief*, slide 21.

⁷⁸ MCIA has one anthropologist on staff, but outsources most non-military SME requirements to academia.

Bibliography

Primary Sources

There was no shortage of strategic guidance documents to draw from in preparing this paper. The primary source documents reviewed ranged from strategic vision documents such as the President's *National Security Strategy* to military doctrinal publications such as FM 3-35 *COUNTERINSURGENCY*. All of the primary sources provided valuable information, but many of them lacked the fidelity to clearly prioritize activities required to prepare for irregular warfare. The documents most influential in the creation of this paper included the 2006 *Quadrennial Defense Review*, the *Irregular Warfare Joint Operating Concept*, and those drawn from the Marine Corps Lessons Learned archives. The information resident in these documents created both a path to prepare for irregular warfare, in addition to identifying recent lessons learned outlining deficiencies in current capabilities.

- Chairman of the Joint Chiefs of Staff. National Military Strategy of the Unites States of America-A Strategy for Today; A Vision for Tomorrow. 2004.
- Center for Military Readiness Policy Analysis. "Women in Land Combat." *CMR Report*,

 Number 16 (April 2003). www.cmrlink.org/CMRNotes/M38V8CCMRRPT16.pdf
 (accessed March 19, 2008)
- Commandant of the Marine Corps, Commandant of the Coast Guard, and Chief of Naval

 Operations. A Cooperative Strategy for 21st Century Sea Power. November 2007

 Commandant of the Marine Corps and Chief of Naval Operations. Naval Operating Concept

 2006. September 1, 2006.

- Commandant of the Marine Corps. Academic Year 2008-2009 Full Time Study in National

 Defense Intelligence College Undergraduate and Graduate Program Selections.

 MARADMIN 180/08. March 17, 2008.
- Commandant of the Marine Corps. FY 2008 Marine Corps Foreign Language Proficiency Pay

 Entitlements and Eligible Languages. MARADMIN 052/08. January 7, 2008.
- Commandant of the Marine Corps. FY2007 Marine Corps Foreign Language Proficiency Pay (FLPP). MARADMIN 319/07.
- Commandant of the Marine Corps. Foreign Language Proficiency Pay (FLPP) Program. MCO 7220.52E. June 6, 2006.
 - http://www.usmc.mil/directiv.nsf/bc9ae2674a92558d852569140064e9d8/73320d70ad7a
 5357852571b1005fcd3e/\$FILE/MCO%207220.52E.pdf (accessed November 20, 2007)
- Commandant of the Marine Corps. Intelligence Officer Company Grade Professionalization

 Program. MARADIN 019/08, January 9, 2008.
 - http://www.usmc.mil/maradmins/maradmin2000.nsf/37f49138fc3d9c00852569b9000af6
 b7/eed1cab745be7ae3852573cb005e9230?OpenDocument (accessed Jan 26, 2008)
- Commandant of the Marine Corps. *Junior Officer Career Cryptologic Officer Program*.

 MARADIN 020/08, January 9, 2008.
 - http://www.usmc.mil/maradmins/maradmin2000.nsf/37f49138fc3d9c00852569b9000af6
 b7/8c47297558df769e852573cb0002ccd4?OpenDocument (accessed Jan 26, 2008)
- Commandant of the Marine Corps. *Marine Corps Personnel Assignment Policy*. MCO P1300.8R. October 4, 1994.
 - $\underline{http://www.usmc.mil/directiv.nsf/73dd6bb050e72cf385256bca0072322f/1e9306bd709a}$

95238525671c00541800/\$FILE/MCO%20P1300.8R%20W%20CH%201-8.pdf

- Commandant of the Marine Corps. FY 09 National Security Agency (NSA) Cryptologic Intern

 Programs. MARADMIN 058/08, January 18, 2008.
- Commandant of the Marine Corps. Marine Corps Strategy 21. November 3, 2000.
- Concepts And Plans Division, MCWL. "Irregular Warfare: New concepts for consideration."

 Marine Corps Gazette, Oct 2007, 26-27.
- Harris, USMC Capt Russell. "Requirements for Afghan Crypto-Linguist Training." November 13, 2007.
- Harris, USMC Capt Russell. "Crypto-Linguist Language Enlistment Incentives." April 5, 2006.
- Harris, USMC Capt Russell. "Marine Corps Position on Language Transformation." February 14, 2006.
- Harris, USMC Capt Russell. "Marine Corps Recruiting of Heritage GWOT Linguists." March 16, 2006.
- Harris, USMC Capt Russell. "Screening For Linguists at the Recruit Depots." August 29, 2007.
- Headquarters U.S. Marine Corps. *Intelligence*. MCDP 2. Washington, DC: Headquarters U.S. Marine Corps, June, 7 2007.
- Headquarters U.S. Marine Corps. Marine Corps 2005-2015 ISR RoadMap. Version 1.1.

 Washington, DC: Headquarters U.S. Marine Corps, October 2, 2006.
- Headquarters U.S. Marine Corps. Marine Corps Concepts for a Changing Security Environment.

 Washington DC: Headquarters U.S. Marine Corps, June 2007.
- Headquarters U.S. Marine Corps, Intelligence Department. OSD Language Initiatives: Defense Language Transformation Roadmap. 2007.

- Headquarters U.S. Marine Corps, Intelligence Department. *USMC Progress on the Defense Language Transformation Roadmap*. Draft working papers provided by Capt Russ Harris, USMC. January 15, 2008.
- Headquarters U.S. Marine Corps, Intelligence Department. *DCGS-MC Input for ISR Roadmap*.

 Draft working papers provided by LtCol Michael Lindeman, USMC. January 22, 2008.
- Headquarters U.S. Marine Corps, Intelligence Department. Selected Marine Corps Reserve,

 Intelligence Support Battalion.

 http://hqinet001.hqmc.usmc.mil/dirint/mcrip/default.asp?page=121 (accessed April 9,

2008).

- Headquarters U.S. Marine Corps, Plans, Policies, and Operations. Long War Concept: The

 Marine Corps Vision for Strategic Force Employment ISO the Steady State Security

 Posture. Plans, Policies and Operations presentation to CMC. February 5, 2008.

 Author's personal files. Received February 25, 2008.
- Headquarters U.S. Marine Corps. *United States Marine Corps Concepts and Programs*. Washington, DC: Headquarters U.S. Marine Corps, 2007.
- Headquarters U.S. Marine Corps, Intelligence Department. 202K MOS Buid Update. HQMC Intel Department brief to CMC. December 26, 2007. Author's personal files. Received January 15, 2008.
- Marine Corps Center for Lessons Learned. *Interagency Activity in Stability Operations*. May 18, 2007.
- Marine Corps Center for Lessons Learned. *Tactical Unmanned Aerial Vehicle (TUAV)*Operations: The RQ-7 Shadow 200. January 2, 2007.

- Marine Corps Center for Lessons Learned. 3rd Radio Battalion Post-Deployment Lessons and Observations Quick Look Report. September 3, 2006.
- Marine Corps Center for Lessons Learned. Intelligence Enhancement in the Infantry Battalion:

 Producing Actionable Tactical Information. May 21, 2007.
- Marine Corps Center for Lessons Learned. *Intelligence Capability Enhancements: OIF Infantry Battalions Operation METRO*. January 4, 2007.
- Marine Corps Center for Lessons Learned. Irregular Warfare (IW) General Purpose Forces (GPF) Assessment. June 6, 2007.
- Marine Corps Center for Lessons Learned. *Intelligence Exploitation of Enemy Material*. June 20, 2006.
- Marine Corps Center for Lessons Learned. *Intelligence and Surveillance Related Lessons from*the Global War on Terrorism. September 9, 2005.
- Marine Corps Combat Development Command. A Tentative Manual for Countering Irregular

 Threats; An Updated Approach to Counterinsurgency. Quantico VA, June 7, 2006.

Marine Corps Intelligence Activity. Command Brief.

http://www.quantico.usmc.mil/activities/?Section=MCIA. Accessed January 30, 2008.

Marine Corps Intelligence Schools. *Combined MOS Slicksheets*. MCIS Presentation detailing MOS school curriculum provided by LtCol Fred Egerer. Author's files received January 15, 2008.

Marine Corps Intelligence Schools. *Intelligence Training and Education Center of Excellence (ITECOE)*. Command overview presentation provided by LtCol Fred Egerer, USMC. Author's files received January 15, 2008.

Marine Corps Intelligence Schools. MCIS Intelligence Training Enhancement Program (ITEP).

Program overview presentation provided by LtCol Fred Egerer, USMC. Author's files received January 6, 2008.

Marine Corps Intelligence Schools. *Annual Report 2008*. Received from Col Cubillo, USMC. March 15, 2008.

Marine Corps Training and Education Command. MOS 0211 Roadmap.

http://www.tecom.usmc.mil/g3/MOSRoadmaps/0211-0291.pdf. Accessed December 20, 2008.

Marine Corps Training and Education Command. MOS 0231 Roadmap.

http://www.tecom.usmc.mil/g3/MOSRoadmaps/0231-0291.pdf. Accessed December 20, 2008.

Marine Corps Training and Education Command. MOS 0241 Roadmap.

http://www.tecom.usmc.mil/g3/MOSRoadmaps/0241-0291.pdf. Accessed December 20, 2008.

Marine Corps Training and Education Command. MOS 0261 Roadmap.

http://www.tecom.usmc.mil/g3/MOSRoadmaps/0261-0291.pdf. Accessed December 20, 2008.

Marine Corps Training and Education Command. MOS 2621 Roadmap.

http://www.tecom.usmc.mil/g3/MOSRoadmaps/2621-2691.pdf. Accessed December 20, 2008.

Marine Corps Training and Education Command. MOS 2631 Roadmap.

http://www.tecom.usmc.mil/g3/MOSRoadmaps/2631-2691.pdf. Accessed December 20, 2008.

Marine Corps Training and Education Command. MOS 2671 Roadmap.

http://www.tecom.usmc.mil/g3/MOSRoadmaps/2671-2691.pdf. Accessed December 20, 2008.

President of the United States. National Security Strategy of the United States of America.

September 2002.

President of the United States. National Security Strategy of the United States of America. March

2006.

- Shaw, USAF LtCol Wayne. "NTIRS in Division TACP Operations." Air Land and Sea Bulletin.

 Issue 2007-3. September 2007.
- United States Marine Corps. *Small Wars Manual*. New York: University Press Of The Pacific, 2005.
- U.S. Department of the Air Force. Air Force Engagement in Expeditionary Warfare. October 24, 2006. http://www.dtic.mil/ndia/2006expwarfare/henabray.pdf
- U.S. Department of the Army. *Counterinsurgency*. FM 3-24. Washington, DC: U.S. Department of the Army, December 2006.
- U.S. Department of Defense. Defense Language Tranformation Roadmap. January, 2005.
- U.S. Department of Defense. *Irregular Warfare (IW) Joint Operating Concept (JOC)*. Version 1.0. September 11, 2007.
- U.S. Department of Defense. *Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations*. Directive 3000.05. November 28, 2005.
- U.S. Department of Defense. *National Defense Strategy of the United States of America*. March 2005.
- U.S. Department of Defense. Quadrennial Defense Review Report. February 6, 2006.

Secondary Sources

The preponderance of the secondary sources researched consisted of varying opinions on what is necessary to conduct irregular warfare. Considering the post 9/11 combat operations conducted to date, this topic has become a cottage industry thereby making the volume of material available rather intimidating. In most of the sources listed below, the authors used similar primary sources in the development of their arguments. Distilling these varying and

complex opinions down to those directly applicable to preparing Marine Corps intelligence capabilities for irregular warfare was a difficult task. The authors most useful in refining the paper's concepts included Richard Best's OSINT Congressional Report, Maj Heye's presentation on Company Level Intelligence Cells, Maj J.D. Mann's *Marine Corps Gazette* article on census operations, and Mark Bowden's *Killing Pablo*. These documents all had themes of transitioning concepts into practical application and assisted the author in outlining recommended changes.

- Adams, Gordon. "The problem with expanding the U.S. military | The Bulletin Online." The Bulletin Online. http://www.thebulletin.org/columns/gordon-adams/20070501.html (accessed December 5, 2007).
- Applegate, Melissa A. Preparing for asymmetry: As seen through the lens of Joint Vision 2020 (Studies in asymmetry). Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2001.
- Bartles, Charles, and Lester Grau. "FMSO-JRIC The War Ahead And The Way Ahead."

 FMSO . http://fmso.leavenworth.army.mil/documents/war-ahead.htm (accessed

 December 5, 2007).
- Best, Richard A. *Intelligence Issues for Congress*. CRS Report for Congress RL 33539. Washington, DC: Congressional Research Service, December 18, 2007.
- Boot, Max. "What the Past Teaches about the Future." *Joint Forces Quarterly*. Issue 44, 1st quarter 2007.
- Boot, Max. "The Struggle to Transform the Military." *Foreign Affairs*, Mar/Apr2005, Vol. 84, Issue 2, 109-116.

- Bore, Col (Ret) Henri. "Irregular Warfare in Africa." Marine Corps Gazette, Jul 2006, 38-40.
- Bowden, Mark. Killing Pablo: The Hunt for the World's Greatest Outlaw. New York: Atlantic Monthly Press, 2001.
- Brimley, Shawn, and Vikram Singh. "Averting the system reboot: Innovations and critical lessons from Iraq must be preserved." *Armed Forces Journal*. December 2007.
- Callwell, C. E.. Small Wars: Their Principles and Practice (Third Edition, 1901). Lincoln and London: University of Nebraska Press, 1996.
- Clark, Wesley K. "The Next War." Washington Post, September 16, 2007, B1.
- Collins, Matthew. "Beyond the Van Riper Plan." Marine Corps Gazette, Oct 2006, 24-26.
- Conetta, Carl. "No good reason to boost Army, Marine Corps end strength." Commonwealth

 Institute of Cambridge, MA USA. http://www.comw.org/pda/0701br20.html (accessed

 December 5, 2007).
- Dailey, Dell. "An 'All Elements of Power' Strategy for Combating Terrorism." *The Washington Institute for Near East Policy*. December 18, 2007. http://www.washingtoninstitute.org
- Dinsmore, Capt Jeffrey. "Intelligence Support to Counterinsurgency Operations." *Marine Corps Gazette*, Jul 2007, 13-16.
- Downes, Eric S. . "Intelligence Reachback." Marine Corps Gazette, Dec 2005, 21-23.
- Ennis, Col Michael. "The Future of Intelligence." Marine Corps Gazette, Oct 1999, 46-48.
- Felter, Joseph, and Brian Fishman. Al Qa'ida's Foreign Fighters in Iraq: A First Look at the Sinjar Records. West Point NY. December 20, 2007.
- Federation of American Scientists. *PDD-35 Intelligence Requirements*. March 2, 1995. http://www.fas.org/irp/offdocs/pdd35.htm (accessed April 9, 2008).

- Garrett, Keith. "Restructure of Remotely Sensed Imagery Intelligence." *Marine Corps Gazette*, Apr 2006, 36-40.
- Grieco, Patrick A. "Achieving Persistent Surveillance Requires Community Effort to Build One Continuum." *Pathfinder*, November/ December 2007, 19-22.
- Grau, Lester. "Guerrillas, terrorists, and intelligence analysis: something old, something new."

 Military Review, July 1, 2004.
- Harding, Steve. "Training Arabic Linguists." Soldiers Magazine. May 2004.
- Heye, Maj, USMC J.D. Company Level Intelligence Cell Overview Brief. December 18, 2008.
- Higgins, USMC LtCol James B. "Culture Shock: Overhauling the Mentality of the Military."

 Marine Corps Gazette, Feb 2006, 48-51.
- Hoffman, LtCol, USMC (Ret) F.G. "Preparing for Hybrid Wars." *Marine Corps Gazette*, Mar 2007, 57-61.
- Hoffman, LtCol, USMC (Ret) F.G.. "The Corps' Expansion, Strategic risks and benefits."

 Marine Corps Gazette, Jun 2007, 42-44.
- Lively, Capt James W. "Cultural Education." Marine Corps Gazette, Apr 2007, 21-25.
- Livingston, USMC SSgt Amos. "The Next Step for Intelligence." *Marine Corps Gazette*, Feb 2007, 15-16.
- Mann, USMC Maj, Morgan G.. "'Census Operations' and Information Management." *Marine Corps Gazette*, Apr 2006, 24-28.
- Moyer, Mark. Phoenix and the Birds of Prey: Counterinsurgency and Counterterrorism in Vietnam. University of Nebraska Press. 2007.
- Munson, Peter J. . "Cultural Education and the Reading Program." Marine Corps Gazette, Jan

2006, 49-52.

- Osborn, Kris. "U.S. Aviators, UAVs Team Up Against IEDs After Iraq Success, Army Takes

 Tactics to Afghanistan." *Defense News*, Jan 21, 2008. 1.
- Peters, Ralph. "PREVIEW: The Counterrevolution in Military Affairs." The Weekly Standard. http://www.weeklystandard.com/Utilities/printer_preview.asp?idArticle=6649&R=EB2 E6567 (accessed December 5, 2007).
- Wright, Lawrence. "The Spymaster: Can Mike McConnell fix America's intelligence community?" *The New Yorker*. January 21, 2008.

 http://www.newyorker.com/reporting/2008/01/21/080121fa_fact_wright (accessed January 25, 2008)