

Academic Year 2016 - 2017

Marine Corps University Research Topic Nominations

**Note: If you select one of the following research topics please contact the POC listed and coordinate the submission of your research.*

Command and Control

[A new concept for contested amphibious landing](#)

Fires

[Are WWII Ranges the best way to train today's Marine?](#)

[Marine Corps Considerations and Perspectives on Navy Mine Countermeasures \(MCM\)](#)

Force Structure

[Amphibious Shipping Shortfall and Alternative Platform Risk](#)

[BENEFITS OF INCREASED SECURITY COOPERATION ENGAGEMENT WITH MALAYSIA, INDONESIA AND VIETNAM](#)

[Budgetary management challenges and opportunities to enable cost effective and integrated implementation and management of the DoD Cyber Strategy](#)

[Counterintelligence/Human Intelligence Military Occupational Specialty Recruitment and Selection in Human Resource Management](#)

[Cyber/EW convergence in the Marine Corps](#)

[Cyberspace workforce retention incentives.](#)

[Event Horizon: Material Readiness and the Impact of the Fiscal Cliff](#)

[Gender Free Utopia](#)

[IMPACT OF 10TH ARG HOMEPORT LOCATION THAT BEST SUPPORTS RAPIDLY EMERGING THREATS AND DISTRIBUTED LAYDOWN IN THE PACOM AOR](#)

[INTEGRATING THE JAPAN SELF DEFENSE FORCE \(JSDF\) INTO MARINE CORPS BASE \(MCB\) CAMP BUTLER](#)

[POM-Year Capabilities Based Assessment \(CBA\) Process Improvement](#)

[Reasons why Marines are ending their active service contracts in the 0211](#)

Information Operations/Cyber

[Assessing Effects in the Cognitive Dimension](#)

[Cyber Support for the Close Fight](#)

[Measures of Performance \(MOP\) and Measures of Effectiveness \(MOE\) for Defensive Cyberspace Operations \(DCO\)](#)

[Network Heterogeneity and Network Security](#)

[Offensive Cyberspace Operations \(OCO\) Planning and the Joint Targeting Process](#)

[People's Republic of China \(PRC\) and Radical Leftist Activities \(RLA\) influence operations \(IO\) directed against the US and JSDF forces/basing on Okinawa.](#)

[PRC Influence on US Foreign Policy by Denial of Int'l Shipping Through South China Sea](#)

[PRC Use of Outbound Foreign Direct Investment to Influence the Indo-Pacific](#)

Logistics

[Cyber Allegory of the Cave: The Proliferation of I.T. Systems and Impacts on Training, Readiness, and Enterprise Logistics](#)

[GCCSS-MC](#)

[Managing Complex Projects](#)

[UDP Next for Combat Support \(CS\) and Combat Service Support \(CSS\)](#)

Technology

[MCM Amphibious capability against Anti-Access/Area-Denial \(A2AD\) threats in the littorals.](#)

[The Adverse Conditions Being Set by The Third Offset Strategy – A False Dichotomy Putting Our National Security at Risk](#)

Training

[Decreasing Lone Wolf Attacks / Insider Threats](#)

[Going on the Offense in the Fight to Prevent Sexual Assault](#)

[Identification, collection and integration of Force Preservation \(FP\) data](#)

[Readiness Assessment Metrics for Marine Corps Operating Forces](#)

[Standardized Structure for Security Managers](#)

Command and Control

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: A new concept for contested amphibious landing

*TOPIC DESCRIPTION: Conduct a contest for the team that can develop the most innovative and comprehensive concept for a successful amphibious landing in a contested environment.

*EXTENDED TOPIC DESCRIPTION: Apply new and future technologies and science to develop innovative ways to safely and effectively conduct and amphibious landing in a contested environment. Obstacles may include: physical barriers, human barriers (civilians, children), cyberattack, mines/IEDs, ground or aerial fires, comms denial, GPS denial, etc. Concept should start at the shallow water mark all the way to the objective. (Don't forget Multi-Service tasks and C2). Covert landings options ideal. Science and technology may be future, but must be conceivable and based on current research or capability.

May conduct a contest or have several students write on this topic to create diverse views and encourage creativity, producing more innovative result.

*DESIRED OBJECTIVES OF THE RESEARCH: Gain some new perspective on a valuable mission given current S&T.

*REQUESTING/SPONSORING ORGANIZATION: Marine Corps Forces Command / Science Advisor

*POINT OF CONTACT: Meggan Schoenberg

*MAILING ADDRESS: 1775 Forrestal Drive, Norfolk VA 23551-2400

EMAIL ADDRESS: Meggan.schoenberg@usmc.mil

*TELEPHONE NUMBER Com: 757-836-2127 DSN: 836-9171

FAX NUMBER (757) 836-2149

DESIRED RESEARCH COMPLETION DATE: As soon as possible or within the next 2 years.

AVAILABLE FUNDING, IF ANY: None

COMMENTS: Submitted by MFC Science Advisor

Fires

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: Are WWII Ranges the best way to train today's Marine?

*TOPIC DESCRIPTION: Are our antiquated static ranges our bid for success in the future conflicts?

*EXTENDED TOPIC DESCRIPTION: Currently we do not possess the capability to engage a moving target in training with any realism. In Combat the enemy moves and we are not very good at tracking him as we have no training device that prepares our young Marines for this skillset.

*DESIRED OBJECTIVES OF THE RESEARCH: Identify the requirement for Moving target ranges in the Marine Corps and solve this dilemma.

*REQUESTING/SPONSORING ORGANIZATION:

*POINT OF CONTACT: Gunner Vince Kyzer

*MAILING ADDRESS: 1st Marine Division Camp Pendleton Ca 92055

EMAIL ADDRESS: Vincent.kyzer@usmc.mil

*TELEPHONE NUMBER 760-468-9943

*CLASSIFICATION: Unclassified

*(The topic as it is presented is not classified; however, the research and the final paper will be **SECRET**.)*

*RESEARCH TOPIC TITLE: Marine Corps Considerations and Perspectives on Navy Mine Countermeasures (MCM)

*TOPIC DESCRIPTION: Examine whether the Navy is sufficiently postured now and in the future to support MCM requirements and operational timelines associated with amphibious assault operations.

*EXTENDED TOPIC DESCRIPTION:

1. Consider using OPLAN vignette to articulate sufficiency of MCM capability and capacity as it relates to support operational timelines.

- Sufficiency of Very Shallow Water (VSW), Surf Zone (SZ), and Beach Zone (BZ) detection capabilities and capacity

- VSW through Beach Exit detection/neutralization timeline examination. Are these realistic in high/low threat (mined) environments

- Consider notional billets, actual staffing, and numbers required to support timeline. Not just “can we meet timeline”, but “what would it take to support timeline given current CONOPS”

- Examine essential and potential Joint support to Assault Breaching Mission. (e.g., USAF capability/capacity to support JDAM Assault Breaching System (JABS) breaching mission)

- Summarize environmental impacts on timeline (e.g., tides, surf, currents, near-shore, and beach gradients)

2. Examine relevant Joint, Navy, and USMC operating concepts. Are there recommendations to be made for amplifying or adjusting USMC operating concepts of EF21, STOM, or OMFTS? Are there any other USMC or Navy DOTMLPF concerns or considerations? Are there any tactical level considerations (see below)?

- Landing craft formations

- Craft maneuvers (e.g., LCU turnaround)

- Lane width geometry requirements

- Craft Landing Zone (CLZ) footprint / transition areas

- Proofing of assault lanes, beach lanes, and beach landing areas

3. Gather USMC perspectives on risk and risk based decisions as it relates to amphibious assault operations.

- Risk tradespace with reference to clearance requirements, lane widths, number of lanes, JABS sorties availability, confidence criteria for cleared lanes, capacity concerns for VSW to BZ detection/neutralization, timeline concerns, etc.
- No battle damage assessment (BDA) of JABS breaching mission
- CPI or other criteria

4. Other considerations

- Joint data sharing common operational picture (COP) - Data flow/capacity
- Coalition operations – data/information sharing/releasability
- Follow-on clearance/proofing in BZ
- Realistic MCM training/exercise environments
- Joint, full-scale MCM in support of amphibious ops exercise
- GPS denied environment

*DESIRED OBJECTIVES OF THE RESEARCH: Conduct holistic examination of the problem set, while identifying capability and capacity gaps, and any other concerns and recommendations. Brief findings to Navy and Marine Corps leadership.

*REQUESTING/SPONSORING ORGANIZATION: OPNAV N95

*POINT OF CONTACT: CAPT Scott Burleson
LtCol Fred McElman
LtCol August Immel

*MAILING ADDRESS: Office of the Chief of Naval Operations,
2000 Navy Pentagon, Washington DC, 20350-2000

EMAIL ADDRESS: scott.burleson@navy.mil
frederick.mcelman@navy.mil
august.immel@navy.mil

*TELEPHONE NUMBER (703) 697-9759

DESIRED RESEARCH COMPLETION DATE: Summer 2017

AVAILABLE FUNDING, IF ANY: No

COMMENTS: Topic coordinated with CD&I Futures, CD&I FMID, and NSWC, PCD. Other commands/staffs that would for information (not limited to): OPNAV N95, N81, FFC, MFC, Marine Corps Engineer School, CD&I SID, Navy Warfare Development Command, Naval Surface and Mine Warfighting Development Center.

Force Structure

*CLASSIFICATION: UNCLASSIFIED / FOUO

*RESEARCH TOPIC TITLE: Amphibious Shipping Shortfall and alternative platform risk

*TOPIC DESCRIPTION: III MEF requests analysis of the operational risk associated with the utilization of alternative surface platforms due to the decreased availability of Naval amphibious surface vessels.

*EXTENDED TOPIC DESCRIPTION: III MEF's inherent capabilities and forward deployed posture make III MEF a critical PACOM response force. Due to the regions political and regional instability, the rise of a peer competitor, and the future distributed laydown, III MEF requires an at-sea capability to support USMC and broader U.S. objectives in the region. Amphibious shipping availability shortfalls are validated across the MARFORS. The utilization of alternative surface platforms that are present within the MPSRONS and MSC are often included in mitigation strategies and institutional concept development. If a mitigation strategy for addressing insufficient numbers of Naval amphibious combatants involves the use of other platforms, then a complete assessment of the associated risk to known operational requirements across the ROMO is essential. Analysis should also determine the impacts of diverting MPSRON/MS and other platforms from planned missions and OPLAN/CONPLAN requirements.

*DESIRED OBJECTIVES OF THE RESEARCH:

- The research should identify risks/benefits across the range of military operations as it pertains to vessel effectiveness, capabilities and vulnerabilities.
- The research should identify risks associated with utilization of MPSRON/alternative vessels in non-traditional missions determining impacts to readiness, activities, and availability for primary lines of operation.
- The research should incorporate a cost/benefit analysis on the modifications of alternative platforms to support MEU-size amphibious operations, and to man/train/equip these vessels.

*REQUESTING/SPONSORING ORGANIZATION: III Marine Expeditionary Force (MEF)

*POINT OF CONTACT: III MEF AC/S G-35, ATTN: G3 FOPS / G4 Ops

*MAILING ADDRESS: III Marine Expeditionary Force
Unit 35601, FPO AP 96382-5601

*TELEPHONE NUMBER DSN: 315-622-7727/ Commercial: +81 (98) 954-7727

COMMENTS: If accepted, III MEF can provide a useful venue in which to validate findings through experimentation and rehearsal.

*CLASSIFICATION: UNCLASSIFIED / FOUO

*RESEARCH TOPIC TITLE: BENEFITS OF INCREASED SECURITY COOPERATION ENGAGEMENT WITH MALAYSIA, INDONESIA AND VIETNAM

*TOPIC DESCRIPTION: III MEF has been directed by USPACOM/MARFORPAC to engage more with Malaysia, Indonesia, and Vietnam, but requires an in-depth cost/benefit analysis to ensure resource allocation supports meaningful and sustainable engagement.

*EXTENDED TOPIC DESCRIPTION: III MEF's inherent capabilities and forward deployed posture make III MEF the amphibious partner of choice within the Indo-Asia Pacific region. III MEF understands the important role that Malaysia, Indonesia, and Vietnam play in maintaining regional security and stability, but III MEF's engagement with these countries has been fairly limited. In order to support USMC and broader U.S. objectives in the region, III MEF is interested in focused research on the benefits and the costs (financial and geopolitical) of increasing security cooperation with Malaysia, Indonesia, and Vietnam. This research will improve III MEF's understanding of the region and better inform MEF decisions on resource allocation.

*DESIRED OBJECTIVES OF THE RESEARCH:

- The research should identify costs/benefits related to both strategic and operational objectives (i.e. assured access) and to more tactical costs/benefits (i.e. training opportunities that are otherwise not available in the region).
- The research should identify the best methods to increase meaningful and sustainable mil to mil engagement with each of these partner nations. The research should analyze III MEF's (and other USMC units') existing engagement with each of these countries and the partner nations' military objectives, capabilities, and resource limitations.
- The research should incorporate a cost/benefit analysis on III MEF's current Training and Exercise Employment Plan (TEEP) in order to assess the feasibility and impact of increased operations, actions, and activities. (i.e. decreased engagement with other partner nations).
- The research should address the costs/benefits of both bilateral and multilateral engagement and should address engagement opportunities across the range of military operations (i.e. amphibious operations, maritime domain awareness, HA/DR, etc.). The research should also identify related bilateral and multilateral engagement opportunities involving other countries whenever possible.

*REQUESTING/SPONSORING ORGANIZATION: III Marine Expeditionary Force (MEF)

*POINT OF CONTACT: III MEF AC/S G-5, ATTN: Regional Engagement Section

*MAILING ADDRESS: III Marine Expeditionary Force
Unit 35601, FPO AP 96382-5601

*TELEPHONE NUMBER DSN: 315-622-7048 / Commercial: +81 (98) 954-7048

COMMENTS: The research should take into account the geopolitical context of the region (i.e. China's rise and how this impedes or drives engagement opportunities with each of these countries).

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: Budgetary management challenges and opportunities to enable cost effective and integrated implementation and management of the DoD Cyber Strategy.

*TOPIC DESCRIPTION: The DoD Cyber Strategy, published in April 2015, acknowledged that successful implementation depends on the Department's ability to make difficult financial choices and operate in a cost-effective and efficient manner in order to guarantee the best return on investment, and listed several key objectives that must be met in order to accomplish this.

Included among the key objectives is the need to improve cyber budgetary management capability. The diffuse nature of the DoD cyber budget presents complex challenges to ensure that programs, funding, activities and organizational/management efforts are aligned to enable cost-effective cyber planning, execution and decision-making.

*EXTENDED TOPIC DESCRIPTION: Budget formulation, justification and execution management policy and business practices in-place within the Marine Corps, Military Departments, DoD and Federal levels, should be reviewed and realigned or refined as necessary to enable informed cyber investment decision-making as an integral component of the Federal and Defense budget process.

*DESIRED OBJECTIVES OF THE RESEARCH: Identify key common and Service (Marine Corps) specific actions, budgetary/cost drivers, programs and organizations associated with successful implementation of all aspects of the DoD Cyber Strategy. Also evaluate benchmarks and trends in cyber research and development, personnel, infrastructure and security investments made by other major U.S. and international government and private sector entities. Evaluate best practices for cyber investment and return on investment (ROI) valuation, financing, performance measurement and management decision making. Assess cyber-related programs and budgetary management practices currently in-place within the Marine Corps, other Service Cyber Components, USCYBERCOM, and at the DoD and Federal levels, and identify and discuss potential opportunities for improvement. Research outcomes should include an assessment of progress already made toward improving cyber budgetary management in support of the DoD Cyber Strategy, as well as a prioritized list of recommended initiatives or actions, categorized by type of action (e.g., program, policy, process, reporting, etc.) and describing scope and breadth of potential impact, roles and responsibilities (if applicable) and proposed measures of performance (MOPs) and measures of effectiveness (MOEs).

*REQUESTING/SPONSORING ORGANIZATION: MARFORCYBER

*POINT OF CONTACT: Capt Robert W. Grzelak

*MAILING ADDRESS: MARFORCYBER

ATTN: Capt Robert Grzelak
9800 Savage Rd STE 6850
Fort Meade, MD 20755-6850

EMAIL ADDRESS: rwgrzel@nsa.gov

*TELEPHONE NUMBER 240-373-2676

DESIRED RESEARCH COMPLETION DATE: 06/01/2017

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: Counterintelligence/Human Intelligence Military Occupational Specialty Recruitment and Selection in Human Resource Management

*TOPIC DESCRIPTION: The paper is proposed to analyze and evaluate the impact of allowing entry level recruits to enter the Counterintelligence/Human Intelligence (CI/HUMINT) Specialist Military Occupational (MOS) Specialty similar to entry level marines entering the Intelligence Specialist MOS.

*EXTENDED TOPIC DESCRIPTION: Highly Qualified Marines are considered the best asset or resource for the CI/HUMINT Specialist MOS, which is the reason why the Marine Corps is investing huge amount of capital in human resource management process. Specifically, recruitment and selection process are vital for these two are the first and fundamental stages in managing human resource, ensuring that only those candidates with the highest capabilities, skills and talents conforming to the standards of the CI/HUMINT Specialist MOS.

*DESIRED OBJECTIVES OF THE RESEARCH: The main aim of the study is to investigate the current recruitment and selection process in USMC CI/HUMINT Specialist MOS. In line with this, the following are the specific objectives of the study: To assess the current procedures and steps followed by CI/HUMINT Specialist MOS in its recruitment and selection process; To evaluate the different internal and external factors which affect the current recruitment and selection process in CI/HUMINT Specialist MOS; and To recommend actions and strategies to be implemented in order to enhance or improve the current recruitment and selection in CI/HUMINT Specialist MOS by including entry level recruits.

*REQUESTING/SPONSORING ORGANIZATION: Marine Corps Forces Command/G-2

*POINT OF CONTACT: CI/HUMINT Branch

*MAILING ADDRESS: 1775 Forrestal Drive
Norfolk VA 23551-2400

EMAIL ADDRESS: Billy.e.montgomery@usmc.mil
jesus.h.cordero@usmc.mil
derrick.stanfield@usmc.mil

*TELEPHONE NUMBER (757) 836-1608/1603 DSN: 836-1608/1603

FAX NUMBER (757) 836-1609

DESIRED RESEARCH COMPLETION DATE: AY 2016-2017

AVAILABLE FUNDING, IF ANY: None

COMMENTS: 'Onion'-oriented research would be beneficial if employed in order to arrive at the core reasons for allowing entry level recruits to enter the CI/HUMINT Specialist MOS. Conducting research is like peeling the back layers of an onion—in order to come to the central issue of how to collect the necessary data needed to answer the research questions and objectives, important layers should be first peeled away. With the said process, the researcher will be able to create an outline on what measures are most appropriate to be applied in the study.

*CLASSIFICATION: UNCLASSIFIED

*RESEARCH TOPIC TITLE: Cyber/EW convergence in the Marine Corps

*TOPIC DESCRIPTION: Define whether there would be operational advantage in completely converging Electronic Warfare (EW) and Cyberspace operations

*EXTENDED TOPIC DESCRIPTION: Ever since the term “cyber” was coined, comparisons have been made with EW (electronic effects, fires) and discussions continue about whether the two disciplines should merge under common governance and policies. Opinions range from advocating complete convergence to no convergence to a collaborative and cooperative state somewhere in between. This topic has been made even more important now in light of discussion about making the electromagnetic spectrum its own warfighting domain.

*DESIRED OBJECTIVES OF THE RESEARCH: Define the advantages/disadvantages, both operationally and administratively, of full or partial convergence of EW and cyberspace operations. If partial is preferable, define which aspects would provide an advantage in convergence.

*REQUESTING/SPONSORING ORGANIZATION: MARFORCYBER

*POINT OF CONTACT: Capt Robert W. Grzelak

*MAILING ADDRESS: MARFORCYBER
ATTN: Capt Robert Grzelak
9800 Savage Rd STE 6850
Fort Meade, MD 20755-6850

EMAIL ADDRESS: rwgrzel@nsa.gov

*TELEPHONE NUMBER 240-373-2676

DESIRED RESEARCH COMPLETION DATE: 06/01/2017

*CLASSIFICATION: UNCLASSIFIED

*RESEARCH TOPIC TITLE: Cyberspace workforce retention incentives.

*TOPIC DESCRIPTION: Due to the extensive training required and high demand for trained cyberspace operators in industry the Marine Corps anticipates difficulty in retaining Marines employed in cyberspace roles. The Marine Corps needs to develop an expertise retention strategy that will reduce the loss of highly skilled cyberspace operators.

*EXTENDED TOPIC DESCRIPTION: Across the Department of Defense there are many tools used to incentivize and retain personal with skillsets that require significant training. Currently, the Marine Corps does not have a plan to utilize these type of tools to enhance incentivizing and retaining of cyberspace operators whose training can last up to a year.

*DESIRED OBJECTIVES OF THE RESEARCH: The study should (at a minimum) answer the following questions:

- 1) What incentive and retention tools can the Marine Corps use in order to reduce the loss of skilled cyberspace operators?
- 2) Which groups of cyberspace operators require such the application of these incentive and retention tools?
- 3) What will be the effect of the application or absence of these incentive and retention tools?

*REQUESTING/SPONSORING ORGANIZATION: MARFORCYBER

*POINT OF CONTACT: Capt Robert W. Grzelak

*MAILING ADDRESS: MARFORCYBER
ATTN: Capt Robert Grzelak
9800 Savage Rd STE 6850
Fort Meade, MD 20755-6850

EMAIL ADDRESS: rwgrzel@nsa.gov

*TELEPHONE NUMBER 240-373-2676

DESIRED RESEARCH COMPLETION DATE: 06/01/2017

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: Event Horizon: Material Readiness and the Impact of the Fiscal Cliff

*TOPIC DESCRIPTION: Exploration of how operating in a resource-constrained environment, dwindling budgets, and skyrocketing deficits impacts the Marine Corps ability to be combat ready.

*EXTENDED TOPIC DESCRIPTION: Current Fiscal Years Defense Program (FYDP) funding profile shows a reduction in out years of Overseas Contingency Funds reliance and a dwindling availability of end year "plus-ups." Total Obligation Authority (TOA) is planned to be reduced by 25% within four fiscal years. This topic will explore how decreases in budgets have had (or will have) a corresponding drop in materiel readiness, which in-turn adversely effects Mission Essential Tasks (METs) units train to and, ultimately the entire Marine Corps capability to perform selected Title 10 tasks. Examine the use of O&MMC funds at the tactical level, and its impact on METs at the MEF level, as this connects to the overall combat readiness of the Marine Corps. Relate this to the emerging threat requirements the Marine Corps is likely to encounter over the next 5- 10 years to flesh out a capability impact analysis tracing "dollars-to-readiness". Research topic context: is our force material readiness in danger of being crushed by the gravity of a fiscal void created with evaporating budgets?

*DESIRED OBJECTIVES OF THE RESEARCH: Deduce exactly what capabilities would or could be impacted with budget reductions and how "dollars to readiness" impacts Marine Corps Title 10 U.S.C. obligations.

*REQUESTING/SPONSORING ORGANIZATION: MARFORCOM AC/S G-4 Ground Material Readiness Branch (GMMB)

*POINT OF CONTACT: LtCol Bradley W. Anderson, Branch Head GMMB

*MAILING ADDRESS: 1775 Forrestal Drive, Norfolk, VA 23551

EMAIL ADDRESS: bradley.anderson@usmc.mil

*TELEPHONE NUMBER (757) 836-0756 DSN: 836-0756

FAX NUMBER (757) 836-2906

DESIRED RESEARCH COMPLETION DATE: NLT Fall 2017

AVAILABLE FUNDING, IF ANY: Recommend TECOM

COMMENTS: Research may include travel to HQMC P&R, I&L (Pentagon) and various OpFor MARFOR/MEF/MS level tactical units for analysis. Comptrollers, Supply

Personnel, Maintenance Management, and other Material Readiness SME's may require interview.

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: Gender Free Utopia

*TOPIC DESCRIPTION: SECDEF directed inclusion of women in all MOSes, to include specifically units typically associated with direct ground combat. Is this wise?

*EXTENDED TOPIC DESCRIPTION: Analyze what the best practice is with regard to success of units that effect direct ground combat activities. What are their mission essential tasks? What is ground combat like? What types of skills are required of Marines and sailors who serve with Marines in the execution of direct ground combat? What type of person is most likely to succeed in these scenarios, environments, and battles? What are the characteristics of units who succeed in these scenarios? What distracts units from succeeding in direct ground combat? Have other nations experimented with the notion of including women in "all-male units," or is the United States in uncharted waters? Does the inclusion of women in an all-male unit aim to make these units more successful, more lethal, more efficient in the execution of missions in a ground combat scenario?

*DESIRED OBJECTIVES OF THE RESEARCH: Recommend continuation of current SECDEF guidance to implement inclusion of women into all MOSes to include units that typically effect ground combat, OR reverse the policy, restriction these units to male only personnel.

*REQUESTING/SPONSORING ORGANIZATION: Marine Corps Forces Command/G-4

*POINT OF CONTACT: Col Matt Travis

*MAILING ADDRESS: 1775 Forrestal Dr., Bldg: NH-33, MARFORCOM, NSA
Hampton Roads, Norfolk, VA 23551

EMAIL ADDRESS: matthew.travis@usmc.mil

*TELEPHONE NUMBER 757-836-1647 DSN: 836-1647

FAX NUMBER 757-836-1687

DESIRED RESEARCH COMPLETION DATE: 1 May 2017

AVAILABLE FUNDING, IF ANY: None

*CLASSIFICATION: UNCLASSIFIED / FOUO

*RESEARCH TOPIC TITLE: IMPACT OF 10TH ARG HOMEPORT LOCATION THAT BEST SUPPORTS RAPIDLY EMERGING THREATS AND DISTRIBUTED LAYDOWN IN THE PACOM AOR

*TOPIC DESCRIPTION: Recent discussions by the U.S. Navy have indicated a desire to create a 10th Amphibious Readiness Group (ARG) based out of either the West coast or East coast of the United States to create an additional ready and relevant forward deployed force in support of combatant commander's operational requirements. Amphibious shipping availability shortfalls are validated across the MARFORS in a time of increasing threats in both the EUR/AF and PACOM AORs. Additionally, there remains the need to provide a counter terrorism capability with an increased awareness of existential threats in the PACOM AOR. This research is meant to identify the optimal basing and employment capability that serves to address the opportunities and challenges in the PACOM AOR.

*EXTENDED TOPIC DESCRIPTION: Any identified location of the 10th ARG will create opportunities for MEU/ARG rotations within the PACOM AOR. Similarly, an additional ARG resource could create challenges to existing rotations in PACOM if not resourced and utilized properly. Focused research should account for how this ARG is to be employed and what impacts or opportunities this will create for III MEF distributed forces, the 31st Marine Expeditionary Unit, FDNF shipping and transiting west coast ARGs.

*DESIRED OBJECTIVES OF THE RESEARCH: Identify opportunities, benefits and challenges of 10th ARG location in light of rapidly emerging threats in the PACOM AOR.

- Based off an east coast location of the 10th ARG, the research should provide what the impact will be to forces forward deployed within PACOM AOR, specifically III MEF. It is envisioned that an east coast location will provide additional resources within the Pacific due to the 10th ARG's probable focus on the CENTCOM AOR. The research should validate or disprove this assumption by demonstrating how the MEU/ARG that was assigned to CENTCOM may or may not be now available to PACOM requirements.
- The research should identify what opportunities and challenges exist with the 10th ARG based on the west coast of the United States, similar to intent concerned with an east coast basing. However, the research in this case should also consider the impact to current FDNF requirements and operational employment of the 31st MEU in its current configuration.
- Another focal point of this research should include basing options within the PACOM AOR direct, to include Japan, Guam or the Philippines. While more challenging and dependent on a variety of outside factors outside the purview of this study, there is an obvious benefit to assigning additional amphibious capabilities to the Pacific region, however challenges are many and difficult to codify. This research could assist in identifying those challenges in a prioritized and quantifiable fashion to at least address the question of what is in the realm of the possible.

- The last area this research could help to inform is any impact to THE distributed laydown as envisioned by the Defense Policy Review Initiative. As III Marine Expeditionary Force expands its forces across the PACOM AOR, significant challenges exist in how III MEF supports current OPLAN/COMPLAN requirements and exercise support. Conceptually, the 10th ARG can mitigate those challenges if based and employed properly. The study should investigate what impact the 10th ARG will have to the distributed laydown if aligned to the PACOM theater of operations.

*REQUESTING/SPONSORING ORGANIZATION: III Marine Expeditionary Force (MEF)

*POINT OF CONTACT: III MEF AC/S G-5, ATTN: Regional Engagement Section

*MAILING ADDRESS: III Marine Expeditionary Force
Unit 35601, FPO AP 96382-5601

*TELEPHONE NUMBER DSN: 315-622-7048 / Commercial: +81 (98) 954-7048

COMMENTS: If this topic is accepted, significant consideration will need to be paid to classification issues along with access to U.S. Navy planning and efforts. This may limit what the study can provide if not coordinated.

*CLASSIFICATION: UNCLASSIFIED / FOUO

*RESEARCH TOPIC TITLE: INTEGRATING THE JAPAN SELF DEFENSE FORCE (JSDF) INTO MARINE CORPS BASE (MCB) CAMP BUTLER

*TOPIC DESCRIPTION: III MEF desires to integrate JSDF into USMC bases in Okinawa in order to demonstrate the USMC commitment to the U.S./Japan alliance and improve local perception of USMC activities on Okinawa. This research is meant to identify and expound on opportunities and challenges associated with USMC/JSDF base integration on Okinawa.

*EXTENDED TOPIC DESCRIPTION: Effective base integration hinges on the identification of JSDF requirements that necessitate regular and persistent use of USMC bases and facilities. The identification of suitable bilateral basing requirements is challenging due to JSDF financial and capability constraints, national/local political disagreements on basing, and local perceptions toward U.S. basing on Okinawa. Focused research on current and future JSDF requirements and basing challenges on Okinawa will help to identify sustainable opportunities for base integration that are politically and socially acceptable.

*DESIRED OBJECTIVES OF THE RESEARCH: Identify opportunities, benefits and challenges of JGSDF base integration on Marine Corps Bases.

- The research should identify opportunities in specific functional areas where integrating JSDF into Marine Corps bases on Okinawa will assist JSDF with meeting their training and operational objectives. Special emphasis should be placed on opportunities that assist JSDF in developing their amphibious capability and support JSDF contingencies in the Southwest Islands. The research should envision full base integration of JSDF into Marine Corps Base Camp Butler as the end state.

- The research should identify opportunities and challenges in different phases of integration: access to training facilities only; the temporary basing of JSDF units on USMC bases; and full-time integration that involves JSDF sharing base operation responsibilities.

- This analysis should examine the second, third (and higher)-order effects resulting from integrating JSDF units on to USMC camps in Okinawa. Issues that need to be identified include: cost sharing, command and control, security, Host/Tenant relationships, base access, range access, etc. Additionally, the research needs to account for the impacts of Futenma Replacement Facility issues, land returns based on Special Action Committee on Okinawa agreement and Defense Policy Review Initiative (DPRI). It should consider Japanese prefectural and national political impacts on USMC's operational environment in Okinawa.

- The research should develop Plans of Action and Milestones and identify appropriate Offices of Primary Responsibility (OPR). Base integration will involve multiple U.S. and Japanese government and military agencies. Identifying the appropriate bureaucratic processes and responsible agencies will allow III MEF to effectively communicate its issues and interests to the right parties.

*REQUESTING/SPONSORING ORGANIZATION: III Marine Expeditionary Force
(MEF)

*POINT OF CONTACT: III MEF AC/S G-5, ATTN: Regional Engagement Section

*MAILING ADDRESS: III Marine Expeditionary Force
Unit 35601, FPO AP 96382-5601

*TELEPHONE NUMBER DSN: 315-622-7048 / Commercial: +81 (98) 954-7048

COMMENTS: If this topic is accepted, due to the political and military aspects of the US-Japan relationship and potential precedent-setting impacts of this initiative, the analysis needs to be thorough and holistic.

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: POM-Year Capabilities Based Assessment (CBA) Process Improvement

*TOPIC DESCRIPTION: Consider new and/or more efficient approaches to the USMC's annual POM-CBA process.

*EXTENDED TOPIC DESCRIPTION: DC, CD&I is responsible for annually producing the Planning Phase contribution to the USMC's PPBE process. The culminating planning product is the Marine Corps Enterprise Investment Plan (MCEIP).

Made up of a sub-products including: a Capabilities List, Gaps List, Solutions Development Directive, and Capabilities Investment Plan, the MCEIP transitions Planning to Programming in route to a Tentative POM.

For the past seven years, a variety of fiscal constraints and leadership decisions have caused DC, CD&I's POM-CBA Process and its end product MCEIP to be altered, measurably increasing supporting commands' resources (IT complexity and personnel) devoted to it. For most of those years the multi-hundred page MCEIP did not meet the needs of the receiving programmers and was not even used, wasting thousands of enterprise-wide man-hours and millions of dollars. It has even recently morphed to the point of back channeling fiscal initiatives to be developed within the Planning phase. The process has not been the same for two consecutive years, thus preventing establishment of baseline from which to measure improvements/efficacy.

*DESIRED OBJECTIVES OF THE RESEARCH: Consider assigning graduate management students to work in CD&I and with DC, P&R, for a semester or better yet a full POM-Year, to learn the evolution and execution of this process since 2009, and then develop and recommend improvements to the CBA process to reduce resource consumption and acceptability to the receiving programmers in P&R.

*REQUESTING/SPONSORING ORGANIZATION: Marine Corps Forces Command/G-9 Capabilities is the submitter of this idea, but DC, CD&I's Capabilities Based Assessment Branch should be the lead.

*POINT OF CONTACT: Mr. Richard Titi

*MAILING ADDRESS: 1775 Forrestal Drive, Norfolk VA 23551-2400

EMAIL ADDRESS: richard.titi@usmc.mil

*TELEPHONE NUMBER (757) 836-0754 / DSN 836-0754

FAX NUMBER (757) 836-2149

DESIRED RESEARCH COMPLETION DATE: At University's or DC, CD&I's discretion.

AVAILABLE FUNDING, IF ANY: None

COMMENTS: DC, CD&I may or may not be receptive to this research topic. No additional support should be expected from MARFORCOM beyond this topic suggestion.

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: Reasons why Marines are ending their active service contracts in the 0211 Counterintelligence Human Intelligence Specialist (CI/HUMINT) Military Occupational Specialty (MOS)

*TOPIC DESCRIPTION: The paper is proposed to analyze and evaluate the impact of Marines ending their service contracts in the 0211 Counterintelligence Human Intelligence Specialist (CI/HUMINT) Military Occupational Specialty (MOS).

*EXTENDED TOPIC DESCRIPTION: The information that this research could provide will enable the Marine Corps to promote strategies that will minimize the high rates of CI/HUMINT marines leaving active duty service while optimizing the levels of staff retention. Optimization can be reached by means of: enhancing recruitment (opening the 0211 MOS to E-3/Lance Corporals, Lateral Move eligible FTAP marines), job satisfaction (identifying and implementing dedicated career paths for CI, HUMINT, 0212-Technical Surveillance Counter Measures (TSCM) and Enlisted to 0210 Warrant Officer Program), productivity, organizational commitment, excellence/mastery of a specific discipline (NMOS concept), quality intermediate and advance training internal to the Marine Corps and externally available.

*DESIRED OBJECTIVES OF THE RESEARCH: To achieve the general purpose aforementioned, the research will seek to accomplish the following discreet objectives: To identify and assess literature that examines the characteristics of marines ending their active service contracts in the Counterintelligence Human Intelligence Specialist (CI/HUMINT) Military Occupational Specialty (MOS); To distinguish management of a marine perceptions of marines ending their active service contracts in the Counterintelligence Human Intelligence Specialist (CI/HUMINT) Military Occupational Specialty (MOS); To utilize qualitative methods to conduct empirical research regarding marines ending their active service contracts in the Counterintelligence Human Intelligence Specialist (CI/HUMINT) Military Occupational Specialty (MOS); Identify and provide recommendations to improve the retention and minimize the high rates of CI/HUMINT marines leaving active duty service while optimizing staffing levels.

*REQUESTING/SPONSORING ORGANIZATION: Marine Corps Forces Command/G-2

*POINT OF CONTACT: CI/HUMINT Branch

*MAILING ADDRESS: 1775 Forrestal Drive, Norfolk VA 23551-2400

EMAIL ADDRESS: billy.e.montgomery@usmc.mil
jesus.h.cordero@usmc.mil
derrick.stanfield@usmc.mil

*TELEPHONE NUMBER (757) 836-1608/1603 DSN: 836-1608/1603

FAX NUMBER (757) 836-1609

DESIRED RESEARCH COMPLETION DATE: AY 2016-2017

AVAILABLE FUNDING, IF ANY: None

COMMENTS: 'Onion'-oriented research would be beneficial if employed in order to arrive at the core reasons for the departure of marines from active service within the CI/HUMINT MOS. Conducting research is like peeling the back layers of an onion—in order to come to the central issue of how to collect the necessary data needed to answer the research questions and objectives, important layers should be first peeled away. With the said process, the researcher will be able to create an outline on what measures are most appropriate to be applied in the study.

Information Operations/Cyber

*CLASSIFICATION: UNCLASSIFIED

*RESEARCH TOPIC TITLE: Assessing Effects in the Cognitive Dimension

*TOPIC DESCRIPTION: As Information Operations become more important in supporting the operating forces during a wide range of military operations; there is a need for the military to understand the effects on the Cognitive Dimension of the target audience.

*EXTENDED TOPIC DESCRIPTION: The cognitive dimension encompasses the mind of the decision maker and the target audience and includes the realm where these actors think, perceive, visualize, and decide. According to the Joint Information Operations Planning Handbook, "Battle and Campaigns can be lost in the cognitive dimension". As such, it is important that commanders and planners understand the effects of Military Operations (to include Information Operations) have on the cognitive dimension.

*DESIRED OBJECTIVES OF THE RESEARCH: The study should (at a minimum) answer the following questions:

- 1) How do you assess effects in the cognitive dimension?
- 2) What methods should be used to collect intelligence to inform this assessments?

*REQUESTING/SPONSORING ORGANIZATION: MARFORCYBER

*POINT OF CONTACT: Capt Robert W. Grzelak

*MAILING ADDRESS: MARFORCYBER
ATTN: Capt Robert Grzelak
9800 Savage Rd STE 6850
Fort Meade, MD 20755-6850

EMAIL ADDRESS: rwgrzel@nsa.gov

*TELEPHONE NUMBER 240-373-2676

DESIRED RESEARCH COMPLETION DATE: 06/01/2017

*CLASSIFICATION: UNCLASSIFIED

*RESEARCH TOPIC TITLE: Cyber Support for the Close Fight

*TOPIC DESCRIPTION: A description of how Cyberspace Operations support the warfighter in the Close Fight.

*EXTENDED TOPIC DESCRIPTION: This topic should focus on how Cyberspace Operations can be integrated into the close fight. With the current lead time for planning there are questions as to how cyberspace operations can be flexible enough to support the dynamic nature of maneuver warfare in the close fight. Furthermore, a discovery into the command and control and coordinated handoff from on net operations to EW delivered cyber effect is needed to provide greater understanding.

*DESIRED OBJECTIVES OF THE RESEARCH: The study should (at a minimum) answer the following questions:

- 1) How can the Marine Corps best leverage Cyberspace Operations in support of the Close Fight?
- 2) What are the Command and Control procedures and delivery methods for Cyberspace effects in the Close Fight? This question should outline the procedures for all three Cyberspace Lines of Effort (OCO, DCO, and DoDIN Ops)
- 3) What is the best origination of units to support the close fight with regards to DoDIN Ops, DCO, and OCO?

*REQUESTING/SPONSORING ORGANIZATION: MARFORCYBER

*POINT OF CONTACT: Capt Robert W. Grzelak

*MAILING ADDRESS: MARFORCYBER
ATTN: Capt Robert Grzelak
9800 Savage Rd STE 6850
Fort Meade, MD 20755-6850

EMAIL ADDRESS: rwgrzel@nsa.gov

*TELEPHONE NUMBER 240-373-2676

DESIRED RESEARCH COMPLETION DATE: 06/01/2017

*CLASSIFICATION: UNCLASSIFIED

*RESEARCH TOPIC TITLE: Measures of Performance (MOP) and Measures of Effectiveness (MOE) for Defensive Cyberspace Operations (DCO)

*TOPIC DESCRIPTION: Explore potential MOP and MOE with regard to Defensive Cyber Operations.

*EXTENDED TOPIC DESCRIPTION: The current "Cyber Scorecard" methodology of determining the performance of DCO focuses on quantitative analysis of negative events (i.e. Cross domain violations spillages, etc.). This is a reactive approach that does not inform commanders on the friendly actions that are tied to measuring task accomplishment (MOP) or changes in the behavior, capability, or operational environment that is tied to measuring the attainment of an end state, achievement of an objective, or creating of an effect (MOE). There is a need in DCO to better understand how actions taken by network administrators and Cyber Protection Teams facilitate network protection.

*DESIRED OBJECTIVES OF THE RESEARCH: In order to best defend the network there needs to be an understanding of the effects of the actions taken to provide security. Explore potential Measures of Performance and Effectiveness (MOP/MOE) with regard to Defensive Cyber Operations.

*REQUESTING/SPONSORING ORGANIZATION: MARFORCYBER

*POINT OF CONTACT: Capt Robert W. Grzelak

*MAILING ADDRESS: MARFORCYBER
ATTN: Capt Robert Grzelak
9800 Savage Rd STE 6850
Fort Meade, MD 20755-6850

EMAIL ADDRESS: rwgrzel@nsa.gov

*TELEPHONE NUMBER 240-373-2676

DESIRED RESEARCH COMPLETION DATE: 06/01/2017

*CLASSIFICATION: UNCLASSIFIED

*RESEARCH TOPIC TITLE: Network Heterogeneity and Network Security

*TOPIC DESCRIPTION: The push within DoD has been to reduce and consolidate the number of networks into larger and more centralized networks. The stated benefit is an improved ability to manage and secure networks, which may come at the loss defensive value inherent to heterogeneity.

*EXTENDED TOPIC DESCRIPTION: Heterogeneity is a known security factor. The more centralized and uniform a network architecture, the more catastrophic a single compromise can be. The current JIE strategy to consolidate DoD networks does not discuss the security value of having a series of networks with completely different configuration and architecture, and does not adequately calculate the risk caused by consolidating. Conduct a contrarian analysis that evaluates the potential security implications of alternate architectures for DoD, including working to increased segmentation rather than consolidating.

*DESIRED OBJECTIVES OF THE RESEARCH: A realistic assessment of the increased risk posed by consolidation; policy analysis on the costs versus benefits of network consolidation. Potentially proposing an alternate course of action.

*REQUESTING/SPONSORING ORGANIZATION: MARFORCYBER

*POINT OF CONTACT: Capt Robert W. Grzelak

*MAILING ADDRESS: MARFORCYBER
ATTN: Capt Robert Grzelak
9800 Savage Rd STE 6850
Fort Meade, MD 20755-6850

EMAIL ADDRESS: rwgrzel@nsa.gov

*TELEPHONE NUMBER 240-373-2676

DESIRED RESEARCH COMPLETION DATE: 06/01/2017

*CLASSIFICATION: UNCLASSIFIED

*RESEARCH TOPIC TITLE: Offensive Cyberspace Operations (OCO) Planning and the Joint Targeting Process

*TOPIC DESCRIPTION: There is a need to better integrate the Joint Targeting Process into the Cyberspace Operations planning cycle.

*EXTENDED TOPIC DESCRIPTION: Due to the speed in which the Cyberspace Domain changes, a discussion has begun that the Joint Targeting Process does not facilitate OCO Planning. This paper should explore the strengths and weaknesses of the Joint Targeting Process in support of OCO Planning and any changes that could be made in order to facilitate a more coordinated planning process.

*DESIRED OBJECTIVES OF THE RESEARCH: The study should (at a minimum) answer the following questions:

- 1) Does the Joint Targeting Process work in the Cyberspace Domain?
- 2) How can OCO planners utilize Dynamic Targeting as opposed to Deliberate Targeting?

*REQUESTING/SPONSORING ORGANIZATION: MARFORCYBER

*POINT OF CONTACT: Capt Robert W. Grzelak

*MAILING ADDRESS: MARFORCYBER
ATTN: Capt Robert Grzelak
9800 Savage Rd STE 6850
Fort Meade, MD 20755-6850

EMAIL ADDRESS: rwgrzel@nsa.gov

*TELEPHONE NUMBER 240-373-2676

DESIRED RESEARCH COMPLETION DATE: 06/01/2017

*CLASSIFICATION: UNCLASSIFIED

*RESEARCH TOPIC TITLE: People's Republic of China (PRC) and Radical Leftist Activities (RLA) influence operations (IO) directed against the US and JSDF forces/basing on Okinawa.

*TOPIC DESCRIPTION: To obtain information, analysis, and other resources from Japanese (JN) American (US) experts regarding People's Republic of China and Radical Leftist Activities (RLA) influence operations (IO) directed against the US and JSDF forces/basing on Okinawa.

*EXTENDED TOPIC DESCRIPTION:

A. What is the articulated (or de facto, cumulative) PRC strategy for conducting influence operations against the US and Japanese Forces/ basing in Okinawa?

B. What is the desired PRC outcome?

C. What are the primary, secondary, and tertiary audiences?

D. How do the PRC's strategies, goals, objectives, and audience compare to those of the RLA? What are the similarities and what are the differences?

E. What are the specific PRC tools, tactics, techniques, and procedures for conducting information ops?

F. What are the specific RLA tools, tactics, techniques, and procedures, for conducting information ops?

G. What is the assessment of effectiveness of these activities?

H. What useful, unclassified examples can I cite regarding these operations?

I. What PRC governmental and other organizations are involved in conducting information ops?

J. What are the PRC "themes" that are consistent through the intergovernmental effort?

K. What US, Japanese, and Okinawan organizations have been identified as assisting in these PRC info ops

L. What groups comprise the RLA?

M. What US, Japanese, and Okinawan organizations have been identified as assisting in these RLA info ops?

N. What US and Japanese organizations are combatting these PRC info ops?

O. What strategy does the US and/or Japan have to counter PRC influence ops?

P. What strategy does the US and/or Japan have to counter RLA influence ops?

Q. What countermeasures have been tried to detect, neutralize, and turn these operations?

R. What is the assessment of effectiveness of these countermeasures?

*DESIRED OBJECTIVES OF THE RESEARCH: To inform US military leadership and specific audiences about the PRC and RLA IO and provide information, analysis, and policy recommendations to the USG and GOJ regarding PRC and RLA IO.

*REQUESTING/SPONSORING ORGANIZATION: Marine Corps Installations
Pacific, G-2 Division

*POINT OF CONTACT: Richard Pellish

*MAILING ADDRESS: Marine Corps Installations Pacific, G-2 Division
UNIT 35001
FPO, AP 96373-5001

EMAIL ADDRESS: richard.pellish@usmc.mil

*TELEPHONE NUMBER 315-645-6090

FAX NUMBER 315-645-0995

DESIRED RESEARCH COMPLETION DATE: July 2017

AVAILABLE FUNDING, IF ANY: N/A

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: PRC Influence on US Foreign Policy by Denial of Int'l Shipping Through South China Sea

*TOPIC DESCRIPTION: What would be the marginal cost to the global economy if \$5T worth of annual global commerce was routed to avoid the SCS and went around the east side of the Philippine archipelago?

*EXTENDED TOPIC DESCRIPTION: More specifically - what would be the cost to American citizens on a per capita basis?

*DESIRED OBJECTIVES OF THE RESEARCH: Determine how the PRC might have direct, real impact on US consumers and indirectly influence US foreign policy through the threat of disrupting or denying passage of international shipping through the South China Sea, imposing added costs to global trade to divert shipping on a longer route through the East Philippine Sea. Suggest policy steps to mitigate such coercion by the PRC.

*REQUESTING/SPONSORING ORGANIZATION: III MEF

*POINT OF CONTACT: Col Matt Rau, G-2, on behalf of BGEN Jansen, III Dep CG

*MAILING ADDRESS: III MARINE EXPEDITIONARY FORCE
UNIT 35601
FPO AP 96606-5601

EMAIL ADDRESS: Matthew.rau@usmc.mil

*TELEPHONE NUMBER DSN: 315-622-7775

DESIRED RESEARCH COMPLETION DATE: Negotiable.

AVAILABLE FUNDING, IF ANY: None.

COMMENTS: Consider the cost/benefit to PRC's economy should it choose to disrupt or deny international passage. Assess the likelihood of the PRC adopting such a course of action.

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: PRC Use of Outbound Foreign Direct Investment to Influence the Indo-Pacific

*TOPIC DESCRIPTION: The PRC has emerged as a major global investor. How is China using OFDI to influence regional actors and alter the world order?

*EXTENDED TOPIC DESCRIPTION: In the People Republic of China's wielding of the four elements of national power, economic power is the most pervasive. Surpassing Japan as the second largest economy in the world, the PRC commands a leading share of the world's manufacturing and trade. The People's Republic of China now makes more foreign direct investments than it receives. Describe how those investments are made, their distribution, and their demonstrated and likely influence on international relations in the Indo-Pacific region.

*DESIRED OBJECTIVES OF THE RESEARCH: Reveal through research of PRC OFDI their intentions in the region and how those may conflict with stated goals. Suggest in your conclusions specific policies the US could implement to mitigate undesirable intentions. What are the implications for regional stability and potential conflict or conflict resolution?

*REQUESTING/SPONSORING ORGANIZATION: III MEF

*POINT OF CONTACT: Col Matt Rau, G-2, on behalf of BGEN Jansen, III Dep CG

*MAILING ADDRESS: III MARINE EXPEDITIONARY FORCE
UNIT 35601
FPO AP 96606-5601

EMAIL ADDRESS: Matthew.rau@usmc.mil

*TELEPHONE NUMBER DSN: 315-622-7775

DESIRED RESEARCH COMPLETION DATE: Negotiable.

AVAILABLE FUNDING, IF ANY: None.

COMMENTS: LtCol James Shelton, III MEF G-8, has conducted some research on the topic.

Logistics

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: Cyber Allegory of the Cave: The Proliferation of I.T. Systems and Impacts on Training, Readiness, and Enterprise Logistics

*TOPIC DESCRIPTION: Study of the scope of all I.T. Systems currently governing Logistics and Supply Operations within the Marine Corps.

*EXTENDED TOPIC DESCRIPTION: Over 50 different Logistics Automated Information Technology (Log AIT) systems currently govern the combat service support functions within both the Operating Forces and Supporting Establishment within the Marine Corps. Scope includes systems assigned and in use within the U.S.M.C. yet equities with combining existing technologies in the Naval Enterprise may be explored. Explore how the proliferation of Log AIT systems has either improved or confused material readiness reporting, and impacted first term Marine MOS task mastery and training. Has there been a corresponding detrimental effect on unit responsiveness and/or unit readiness resultant? Explore current issues with GCSS-MC roll out and training implementation. Also explore how to track “dollars-to-readiness” as it relates to Financial Improvement Audit Readiness (FIAR), and how these systems communicate with one another (or fail to) through fiscal accounting systems (SABRS) through GCSS-MC and TLCM-OST. Explore the pros and cons of consolidating current Log I.T. systems deemed “redundant” and potential impact on force material readiness. Context for the research topic title: like Plato’s “Allegory of the Cave” users (in the cave) are largely at a loss for understanding the full functionality systems available for use in accomplishing the mission, nor understand the ultimate ends to which they lead. Rarely do they understand vertically, what the data ultimately does for the strategic level (outside the cave) or supporting establishment, in support of the operating forces.

*DESIRED OBJECTIVES OF THE RESEARCH: To recommend ways/means for consolidation and to garnish efficiencies within potentially redundant capabilities, thus saving time, resources and training burdens perceived to skew readiness reporting and data assurance.

*REQUESTING/SPONSORING ORGANIZATION: Marine Corps Forces Command, AC/S G-4 GROUND MATERIAL MANAGEMENT BRANCH (GMMB)

*POINT OF CONTACT: LtCol Bradley W. Anderson, Branch Head GMMB

*MAILING ADDRESS: 1775 Forrestal Drive, Norfolk, VA 23551

EMAIL ADDRESS: bradley.anderson@usmc.mil

*TELEPHONE NUMBER (757) 836-0756 DSN: 836-0756

FAX NUMBER (757) 836-2906

DESIRED RESEARCH COMPLETION DATE: 1 May 2017

AVAILABLE FUNDING, IF ANY: Recommend TECOM

COMMENTS: Research may include travel to MCCSSS, I&L, PEO EIS (Pentagon) and various OpFor MEF/MSC/Using Unit level tactical units for analysis.

*CLASSIFICATION: UNCLASSIFIED

*RESEARCH TOPIC TITLE: GCCSS-MC

*TOPIC DESCRIPTION: Has GCSS MC improved Supply and Maintenance Readiness for the Marine Corps?

*EXTENDED TOPIC DESCRIPTION: Are we training our logisticians too broadly at the first part of their career? Is lack of a Motor Transport MOS not giving a baseline to many of our Marines that they then have to supervise? Are their advantages to having baseline in a functional area before broadening?

Do our logisticians need earlier exposure to DOD logistics because logistics frequently runs from strategic to tactical in one transaction? The Navy does this (Ship tour, Strategic and Operational logistics assignments, back to ship, over and over again).

Is the Marine Corps not getting equitable support from the DOD logistics enterprise (DLA/TRANSCOM) because of lower demand signal?

*DESIRED OBJECTIVES OF THE RESEARCH: Assess efficacy of GCSS-MC in support of Marine Corps equipment readiness

*REQUESTING/SPONSORING ORGANIZATION: 3d MLG

*POINT OF CONTACT: LtCol Patrick Tucker

EMAIL ADDRESS: Patrick.tucker@usmc.mil

*TELEPHONE NUMBER DSN 645-3216

AVAILABLE FUNDING, IF ANY: N/A

*CLASSIFICATION: UNCLASSIFIED

*RESEARCH TOPIC TITLE: Managing Complex Projects

*TOPIC DESCRIPTION: Are the common tools of project management adequate to manage projects that are not only complex from a systems perspective, but also from a business perspective?

*EXTENDED TOPIC DESCRIPTION: I contend that the majority of our acquisition projects are over budget/behind schedule/not meeting technical requirements because we don't have the tools to manage the complexity of today's projects. Complexity is evident not only in the technical aspects of the systems, but in the teams executing the work, and modern business practices that further complicate the effort (such as JSF having multiple foreign military partners, FMS cases, and other non-traditional participants). Project timelines are now so long that major acquisition policies have the opportunity to change several times over the development lifecycle and inject chaos into the effort. Complicated systems have given way to complex systems that vary significantly with time and in some cases have outcomes that are not completely predictable and difficult to test. The management tools for today were developed during the Apollo era to manage those projects, which were complicated machines, but relatively simple by today's standards.

We need a new way of managing things beyond PERT charts, GANTT charts, and CPM....

*DESIRED OBJECTIVES OF THE RESEARCH: Determine if the tools used for project management today are adequate for the management of complex projects or if they are inadequate and part of the problem of cost and schedule overruns and associated performance reductions. Bonus if the researcher can suggest or develop tools to better manage the complex projects of today and the future.

*REQUESTING/SPONSORING ORGANIZATION: II MEF SCIAD (personal idea, I did not staff this through the MEF)

*POINT OF CONTACT: Richard Kirchner

*MAILING ADDRESS: II MEF G9, Bldg H1, Rm 2E11
Camp Lejune, NC 28540

EMAIL ADDRESS: Richard.kirchner@USMC.mil

*TELEPHONE NUMBER 910-451-5628 DSN 751-5628

DESIRED RESEARCH COMPLETION DATE: No specific date

*CLASSIFICATION: UNCLASSIFIED

*RESEARCH TOPIC TITLE: UDP Next for Combat Support (CS) and Combat Service Support (CSS)

*TOPIC DESCRIPTION: Development of a UDP concept to allow for rotational forces for additional CS and CSS to III MEF for both exercises and OPLAN requirements

*EXTENDED TOPIC DESCRIPTION: 1. THROUGHOUT THE YEAR, III MEF'S OPERATIONAL TEMPO ROUTINELY COMES CLOSE TO OUTPACING 3D MLG'S ABILITY TO PROVIDE SUFFICIENT CS/CSS TO TEEPED AND NON-TEEPED THEATER SECURITY EVENTS AND EXERCISES WHILE ALSO INCURRING ADDITIONAL RISK TO POTENTIAL CONTINGENCY OPERATIONS. HISTORICALLY, THE MOST SIGNIFICANT RISKS ARE TO 3D MLG'S ENGINEER, LANDING SUPPORT, AND MEDICAL CAPABILITY. IN ORDER TO REDUCE POTENTIAL CAPABILITY GAPS, 3D MLG REQUESTS ADDITIONAL CAPACITY BE PROVIDED VIA THE UNIT DEPLOYMENT PROGRAM (UDP).

2. ALL PROPOSED UDP'S ARE REQUESTED SPECIFICALLY TO SUPPORT EXERCISES AND CONTINGENCY OPERATIONS. UDP DETACHMENTS WILL BE ATTACHED TO 9TH ENGINEER SUPPORT BATTALION, COMBAT LOGISTICS REGIMENT 3, AND 3D MEDICAL BATTALION.

WE THINK THAT THE FOLLOWING UDP UNITS ARE WHAT ARE REQUIRED MOST AND SOONEST:

-ENGINEER COMPANY: UDP ENGINEER COMPANY WILL PROVIDE 9TH ESB REQUISITE CAPACITY TO SUPPORT THE AGGRESSIVE III MEF TEEP.

-LANDING SUPPORT DETACHMENT: PROVIDE (1) LANDING SUPPORT PLATOON CAPABLE OF PROVIDING A LANDING FORCE SUPPORT PARTY TO AN INFANTRY REGIMENT.

-MEDICAL DETACHMENT: PROVIDE CRITICAL BILLETS IN ORDER TO ALLOW 3D MEDICAL BATTALION TO MAINTAIN (2) SHOCK TRAUMA PLATOONS DURING THE REQUESTED TIMEFRAME.

3. UNITS ARE REQUESTED TO DEPLOY ON CONTINUOUSLY ON A SIX (6) MONTH ROTATIONAL BASES. UNITS WILL REPORT TO 3D MARINE LOGISTICS GROUP AND WILL BE PLACED IN THEIR RESPECTIVE SUBORDINATE BATTALION.

*DESIRED OBJECTIVES OF THE RESEARCH: Validate the efficacy of this concept, determine a plan of execution and associate a cost and time horizon to achieve it.

*REQUESTING/SPONSORING ORGANIZATION: 3d MLG

*POINT OF CONTACT: Capt Zander Carbajal, Maj Neil Hickey

*MAILING ADDRESS: PSC 557, Box 82, FPO AP 96379

EMAIL ADDRESS: zander.carbajal@usmc.mil
edward.bligh@usmc.mil

*TELEPHONE NUMBER DSN 315-637-2039, 315-637-1650

DESIRED RESEARCH COMPLETION DATE: Open

AVAILABLE FUNDING, IF ANY: None

COMMENTS: 3d MLG has briefed various versions of this evolving concept at ILB and MLB.

Technology

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: MCM Amphibious capability against Anti-Access/Area-Denial (A2AD) threats in the littorals.

*TOPIC DESCRIPTION: (POM-18 Gap ID 18-3.3-G1, the Marine Corps has limited ability to proof assault lanes and craft landing zones during amphibious operations in order to ensure maneuver element protection and freedom of maneuver.)

Recent Fleet Forces Command and Marine Forces Command demonstration of MCM amphibious capability in an A2AD environment proved to be disjointed and exposed several gaps of which, the most significant were: 1) The Navy and Marine Corps ability to project combat power ashore effectively; 2) To adequately clear and proof breach lanes and craft landing zones (CLZ); 3) There is much debate on the ability and effectiveness of the Navy and Air Force to neutralize mines and explosive hazards (EH) from the surf zone (SZ) to the beach exit with Joint Direct Attack Munition (JDAM) Assault Breaching System (JABS).

*EXTENDED TOPIC DESCRIPTION: **1. Navy and Marine Corps ability to project combat power ashore effectively:** The preferred clearing and proofing vehicle for capability speed, and protection is the Assault Breaching Vehicle (ABV) with Full Width Mine Plow (FWMP) which, also must work in tandem with the Amphibious Assault Vehicle and its employment of the MK-154 Mine Clearance Line Charge (MICLIC).

The current Navy ship-to-shore connectors are the Landing Craft Utility (LCU) and the Landing Craft Air Cushion (LCAC) vessels.

The LCU is the preferred initial wave vessel in an A2AD environment. However, due to fragmentary development of technology across the Navy and Marine Corps, the FWMP is too wide for the LCU stern gate and the ABV is too bulky and long to traverse around the LCU wheelhouse.

The LCAC is more suitable for the Assault Follow on Echelon (AFOE) for expanding the lodgment area. The LCAC cannot land on a CLZ (100m x 100m area) unless the CLZ has been cleared and proofed, therefore not a viable option for delivering the ABV with FWMP.

Both vessels present problems in getting sufficient equipment ashore to meet the expeditious nature of the Phase II Seize the Initiative operations.

2. Clearing and Proofing of Breach Lanes and CLZ: During amphibious assault operations, the breach lanes and CLZ need to be cleared and proofed before the LCAC vessels can come ashore.

The intended vehicle for clearing and proofing is the ABV with FWMP which cannot be embarked on the LCU due to the size restrictions listed above.

Therefore, the current solution for amphibious assault breaching is to compensate for the loss of the ABVs FWMP by augmenting the assault with an armored D-6 Medium Crawler Tractor (MCT) and fit it with a modified mine rake (MR) – (Commercial off the shelf modification) as the lead vehicle for a proofing capability. The ABV would follow in trace and the FWMP is replaced with a Combat Dozer Blade (CDB) in order to reduce obstacles.

Further degrading this solution is the balancing vehicle weight on the LCU which requires them to be loaded in reverse order of necessity.

Neither the ABV with CDB nor the MCT with MR meet the requirement effectively or efficiently. Both assets now have a single capability vice dual functioning (Clearing and Proofing). The ABV retains a MICLIC capability, but loses a proofing capability. The MCT can neither clear nor reduce obstacles; nor can it plow through mobility kills and it is not as effective as the FWMP at proofing.

Additionally, factors that need to be analyzed: The MCT with MR does not provide the sufficient width for an assault lane with a single proofing pass, it's too slow in comparison to the ABV, and the armor protection is not adequate for vehicle or operator against mines and EHs. The ABVs FWMP has its own deficiencies: When proofing the CLZ, the wedge shaped blade creates rows of EH spoil on each side of the vehicle vice continuously pushing the spoil in one direction as it would if the blade were a single side-cast blade. Collectively, these factors reduce the expeditious nature required in Phase II Seize the Initiative operations.

3. Effectiveness of JABS: JABS is the current Joint solution to clearing the SZ through the beach exit. JABS require a one-to-one ordnance to mines and/or EH ratio. It can only be targeted on surface laid mines/EH. It poses significant problems due to shrapnel produced, uncovering buried mines/EH, displacing mines/EH off targeted area, JABS duds in the breach lane and CLZ, and unknown effectiveness on trajectory impact with multiple close proximity air detonations.

*DESIRED OBJECTIVES OF THE RESEARCH: 1. Validate the Navy and Marine Corps ability to project combat power ashore effectively and efficiently. Expose possible gaps, and recommend possible solutions to partially fill in or overcome gaps.

2. Validate the Marine Corps ability to clear and proof breach lanes and CLZs expeditiously. Expose possible gaps, and recommend possible solutions to partially fill in or overcome gaps.

3. Analyze probability of JABS effectiveness. Expose possible gaps, and recommend possible solutions to overcome gaps.

*REQUESTING/SPONSORING ORGANIZATION: Marine Corps Forces Command/G-4

*POINT OF CONTACT: MGSgt Skehan, Acting Force Engineer Officer

*MAILING ADDRESS: 1775 Forrestal Dr., Bldg: NH-33, MARFORCOM, NSA
Hampton Roads, Norfolk, VA 23551

EMAIL ADDRESS: Brian.skehan@usmc.mil

*TELEPHONE NUMBER 757-836-1655 DSN: 836-1655

FAX NUMBER 757-836-2906

DESIRED RESEARCH COMPLETION DATE: 01 May 2017

AVAILABLE FUNDING, IF ANY: None

COMMENTS:

POC: William P Dobbins III, Force Engineer Officer (15 Jul 16) /
william.dobbins@usmc.mil (757) 836-1555

Additional POCs:

LtCol Michael Hixon – Fires and Maneuver Integration Division, Capabilities Officer
(703) 784-2554

Mr. Stuart Dickey – MARFORCOM, Naval Integration / stuart.dickey1@usmc.mil
(757) 836-1991

LtCol. Danny Howard - MARFORCOM danny.howard@usmc.mil (757) 836-1625

Mr. David Nicholson - Marine Corps Engineer School / david.nicholson@usmc.mil
(910) 440-7980

Mr. Scotty Moore - Marine Corps Engineer School / james.moore@usmc.mil
(910) 440-6007

Mrs. Meggan Schoenberg - MARFORCOM SciAd / meggan.schoenberg@navy.mil
(757) 836-2127

LT. Thomas Sauer – Navy Surface and Mine Warfighting Development Center
thomas.sauer1@navy.mil

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: The Adverse Conditions Being Set by The Third Offset Strategy – A False Dichotomy Putting Our National Security At Risk

*TOPIC DESCRIPTION: Deputy SECDEF Work's Third Offset is viewed by many as unsustainable. It is unreasonable for military leaders to expect an indefinite U.S. technological advantage over our enemies at current levels of spending. The real cost is unthinkable.

*EXTENDED TOPIC DESCRIPTION: An abundance of information countering the Third Offset Strategy is available for research. For the context of this study, it is desired that the focus be placed on alternative, competitive strategies that leverage robotics and autonomy employed at the operational and tactical level; more specifically tailoring this technology to effectively complement the Corps' capability within the Navy's Distributed Lethality framework. The foreseeable future operational environment, for the purpose of this study, is one where sea-based Marines are deployed to operate across the ROMO in densely populated urban littorals. Add to this the increasingly difficult challenge of maneuver in and around these urban littorals, where the enemy employs effective A2AD capabilities. The enemy's A2AD capabilities significantly degrade the Corps' ability to operate across the six warfighting functions, forcing innovation at the tactical and operational level to cover the gaps. This innovative leap occurs without additive technology, and is the result of intellectual rigor placed on generating synergy utilizing existing unmanned systems, software, and complementary capabilities. The end state outlines key areas of focus where U.S. naval forces can optimize defense spending, recapitalize for combat efficiency, and increase combat capability at the tactical and operational levels of war by leveraging existing unmanned systems through the application of complementary strategic alternatives.

*DESIRED OBJECTIVES OF THE RESEARCH: To have the following questions answered:

1) Provided the context outlined in the article, "Is the U.S. Military's Plan to Keep Its Edge Fatally Flawed?" by Robert Haddick (13 Jan 2016), Source:

<http://warontherocks.com/2016/01/is-the-u-s-militarys-plan-to-keep-its-edge-fatally-flawed/>, What are the risks inherent to the Marine Corps' EF-21(R) concept when scoping the problem sets tied to employment of robotics and autonomy?

2) What competitive strategies are compatible, and tactically exploitable, using sea-based deployable, organic unmanned systems in a denied access (physical and non-physical [spectrum]), urban littoral environment? Problem framing examples: 1. Effective distributed operations without access to a network; 2. Fighting existing technology in a pre-digital arena.

3) Given the increased levels of autonomy desired in future robotic capabilities and the implications of autonomous lethality (potentially across the five domains), the imperative for a sixth "ethical" domain exists inside the framework of human and machine teaming. What would such an ethical domain look like?

*REQUESTING/SPONSORING ORGANIZATION: HQMC Aviation

*POINT OF CONTACT: MGySgt Jose Gonzalez

*MAILING ADDRESS: 3000 Marine Corps Pentagon
Room 5D514
Washington, DC 20350

EMAIL ADDRESS: jose.gonzalez1@usmc.mil

*TELEPHONE NUMBER Comm: 703-693-9801 DSN: 223-9801

DESIRED RESEARCH COMPLETION DATE: Sept 2017

AVAILABLE FUNDING, IF ANY: none

Training

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: Decreasing Lone Wolf Attacks / Insider Threats

*TOPIC DESCRIPTION: Security's role in mitigating and preventing lone wolf/insider attacks/threats on hard and soft military targets.

*EXTENDED TOPIC DESCRIPTION: Security Managers must plan, educate and prepare for lone wolf and insider attacks/threats to military and civilian installations. Prevention must be a shared responsibility that starts with Security establishing the foundation.

*DESIRED OBJECTIVES OF THE RESEARCH: Qualitative and quantitative study of Lone Wolf / Insider Threats to ascertain what could have been done to prevent these attacks. Create and deliver a comprehensive training program for personnel

*REQUESTING/SPONSORING ORGANIZATION: Marine Corps Forces Command / Security

*POINT OF CONTACT: Betty Parker-McCullough

*MAILING ADDRESS: Commander, U.S. Marine Corps Forces Command
1775 Forrestal Drive, Norfolk, Virginia 23551

EMAIL ADDRESS: betty.parkermccullough@usmc.mil

*TELEPHONE NUMBER (757) 836-1550 DSN: 836-1550

FAX NUMBER (757) 836-1568

DESIRED RESEARCH COMPLETION DATE: January 2017

AVAILABLE FUNDING, IF ANY: None

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: Going on the Offense in the Fight to Prevent Sexual Assault

*TOPIC DESCRIPTION: The purpose of the current SAPR policy is appropriate, but the means to the end is not effective. Everybody agrees that we want to reduce the occurrence of sexual assault. Is there a better way to go about it?

*EXTENDED TOPIC DESCRIPTION: DOD/DON/HQMC all agree that reducing the occurrence of sexual assault is important to the readiness, cohesion, and effectiveness of military forces. The question is whether the DON SAPR campaign represents a "prevent defense" approach. Analyze what a better approach to reducing sexual assaults would look like. Analyze appropriate human relationship, what real intimacy is, and the role of sex within that context. Perhaps, if Marines and Sailors were taught what constitutes meaningful, long-term relationship, and how sex fits in that context, would the occurrence of sexual assaults be reduced? Marriage & Family Counsellors and Chaplains, not just Sexual Assault Response Coordinators, would be critical to communicating this message.

*DESIRED OBJECTIVES OF THE RESEARCH: Identifying a more effective approach to reducing the occurrence of sexual assault in the Corps.

*REQUESTING/SPONSORING ORGANIZATION: Marine Corps Forces Command/G-4

*POINT OF CONTACT: Col Matt Travis

*MAILING ADDRESS: 1775 Forrestal Dr., Bldg: NH-33, MARFORCOM, NSA
Hampton Roads, Norfolk, VA 23551

EMAIL ADDRESS: matthew.travis@usmc.mil

*TELEPHONE NUMBER 757-836-1647 DSN: 836-1647

FAX NUMBER 757-836-1687

DESIRED RESEARCH COMPLETION DATE: 1 May 2017

AVAILABLE FUNDING, IF ANY: None

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: Identification, collection and integration of Force Preservation (FP) data

*TOPIC DESCRIPTION: Develop a solution set to provide leadership a methodology to quantify, assess and predict potential at risk personnel.

*EXTENDED TOPIC DESCRIPTION: Data that can potentially be used to identify and / or predict FP issues reside in multiple locations and formats as singular and separate data. The Force Preservation Information System (FPIS) will provide the ability to combine and analyze this data and identify root causes so the command leadership can focus on prevention vice reaction.

*DESIRED OBJECTIVES OF THE RESEARCH: Provide leadership one place / report that will have all the needed information that can be used at all levels of command to identify and predict "at risk" personnel.

*REQUESTING/SPONSORING ORGANIZATION: U.S. Marine Corps Forces Command /FPC

*POINT OF CONTACT: Maj Patrick Kiely

*MAILING ADDRESS: U.S. Marine Corps Forces Command
1775 Forrestal Dr.
Norfolk, VA 23551
Building: NH-33

EMAIL ADDRESS: patrick.kiely@usmc.mil

*TELEPHONE NUMBER (757) 836-1954 DSN: 836-1954

FAX NUMBER (757) 836-1575

DESIRED RESEARCH COMPLETION DATE: September 2017

AVAILABLE FUNDING, IF ANY: None

COMMENTS: Various staff sections (Safety, Legal, Equal Opportunity, Medical, Religious Ministries, Family Readiness, Sexual Assault Prevention, Marine Corps Community Services, others to be identified) provide a piece of the FP picture. The current system has barriers that prevent data sharing. The research will identify these barriers, label them as moveable or monument, and make recommendations for barrier removal or mitigation.

The FPIS will provide an analytical process that correlates data and identifies trends across the separate FP efforts. The ICM-RMS (Integrated Clinical Management and Risk Mitigation System) currently exists and has connected some of the pieces of the FP puzzle, but further work is needed. The funding has been identified and the decision to go forward is waiting the Assistant Commandant of the Marine Corps (ACMC) signature.

*CLASSIFICATION: Unclassified (Must have access to classified data to conduct research)

*RESEARCH TOPIC TITLE: Readiness Assessment Metrics for Marine Corps Operating Forces

*TOPIC DESCRIPTION: The Marine Corps enterprise lacks a clear metrics at the unit level and higher required to support operational and strategic assessment.

*EXTENDED TOPIC DESCRIPTION: In MARFORCOM's mission statement and tasks, the Force Readiness task includes a requirement to "[monitor, assess, report, and ensure] the readiness of Marine Corps operating forces to support current operations, contingency plans, and emerging force requirements."1 MARFORCOM is also tasked as the global force manager for the Marine Corps, applying USMC units, or portions of units, to meet combatant commander and service demands for forces.

The foundation of USMC readiness processes is monthly reporting at the measured unit level. Unit commanders report a collective assessment (C-Level), which is the commander's subjective assessment of the unit's "ability to undertake the wartime missions for which they are organized and designed. The assessment may or may not include other measured areas (i.e., personnel, equipment, and supplies on hand, equipment condition, and training)."2 The C-Level is designed to be used at the "measured" unit level. The Joint Staff defines a measured unit as "combat, combat support, and combat service support units of the operating forces; Joint organizations including but not limited to, joint task force headquarters and standing joint force headquarter; CSAs' and provisional or task-organized units constituted in support of an operational plan, contingency plan, or named operation."3 In the Marine Corps, unit readiness reporting generally starts at the battalion/squadron level, based on personnel and supply calculations derived from unit TO/TE requirements.

These unit-level reports are captured in a central database, with the assessments of higher level units based on roll-ups of subordinate unit readiness. This presents several issues:

- Force provider units (also known as enabler units, including intelligence battalions, artillery battalions, etc.) report only as whole units and therefore report personnel and equipment shortfalls when subordinate elements are detached.
- Regiments and MAGs report shortfalls when subordinate units are deployed for missions such as UDP, MEU, and SPMAGTF support.
- MEFs report shortfalls because none has a full set of subordinate units due to steady-state unit deployments.

- OPLAN sourcing solutions tend to be based on global sourcing solutions.
- Assessments of USMC Operating Forces capacity require extensive work in each reporting cycle, and cannot be mapped to relevant data.
- Higher-level readiness goals are not achievable or do not stand up under detailed scrutiny.

Higher-level assessments are often highly subjective, requiring the filtering and adjustment of lower-level readiness reports in order to align the reported data with the specific questions relating to the higher-level assessment. The study should look at the definitions used for higher-level assessment and review the extent to which lower-level reports provide the required data to support higher-level assessment. The study should provide recommended changes, either to higher-level assessment metrics or lower-level metrics, in order to provide a more seamless integration of reporting and higher-level assessment.

The research study should recommend improved metrics for the readiness of measured units. These metrics should accomplish the following goals:

- Recommend the appropriate level of measured-unit reporting for various units.
- Distinguish between the health of a unit (optimized capability under current steady-state operations, including the absence of actionable shortfalls) and the capacity of a unit (reduced scale or outputs due to the deployment of subordinate elements).
- Support accurate quantification of USMC capacity by unit type, in support of OPLAN sourcing.
- Provide clear standards for unit assessment.
- Support task-organization and the integration of reserve augmentation into active component units.
- Support higher-level readiness assessments at the MEF, OPFOR, and Service levels.
- Include units that provide structured subordinates (e.g., artillery battalions) as well as units that provide unstructured detachments (e.g., communications battalions).
- Take into account unit requirements not normally captured in existing readiness processes (non-reportable items, leader-to-led ratios, special qualifications, etc.).
- Incorporate data already resident in personnel, equipment, training, and fiscal management systems.

Improve the relevance of readiness reports as indicators of unit capability, capacity, and health.

Using these unit-level metrics as a foundation, the study should recommend appropriate higher-level readiness metrics for the assessment of OPLANs as well as the health of unit readiness at the OPFOR level. These higher-level metrics should accomplish the following goals:

- Improve the correlation between readiness and resources, including funding.
- Highlight operational and strategic shortfalls requiring Senior-leader engagement.

The study should also examine the definitions used for readiness at the Strategic, Operational, and Tactical levels of readiness and recommend revisions or focused clarifications in order to account for and distinguish between scale (employment of capacity) and health (optimized capability).

The study should carefully consider other ongoing initiatives related to force readiness and force synchronization, including force apportionment processes, improvements to the PLAYBOOK tool, and implementation/refinement of the Cost to Run a MEF (C2RAM) tool.

***DESIRED OBJECTIVES OF THE RESEARCH:** Recommendations to improve the relevance and accuracy of readiness metrics used at the unit level.

Recommendations to improve the readiness metrics used by intermediate and higher-level units.

Recommendations to improve the definitions used for readiness at the Strategic, Operational, and Tactical levels of readiness, in order to account for and distinguish between scale (employment of capacity) and health (optimized capability).

***REQUESTING/SPONSORING ORGANIZATION:** Marine Corps Forces Command

***POINT OF CONTACT:** Dr. William E. Daniels

***MAILING ADDRESS:** 1775 Forrestal Drive, Norfolk, VA 23551

EMAIL ADDRESS: William.daniels@usmc.mil

***TELEPHONE NUMBER** 757-836-1601 836-1601

FAX NUMBER 757-836-0777

DESIRED RESEARCH COMPLETION DATE: 19 April 2017

AVAILABLE FUNDING, IF ANY: MARFORCOM will host meetings, provide SME support, and travel to the Quantico area as required in support of this research topic.

*CLASSIFICATION: Unclassified

*RESEARCH TOPIC TITLE: Standardized Structure for Security Managers

*TOPIC DESCRIPTION: A quantitative or qualitative study on the demanding additional responsibilities levied upon Security Managers without standardized structure in the Marine Corps.

*EXTENDED TOPIC DESCRIPTION: Security Managers are managing additional functions that are not common to or associated with the defined position series as mandated by DOD/DON standards. Many of these functions are levied by higher headquarter level. The standards stipulate that Security Managers are responsible for information and personnel security only. If other responsibilities are levied on Security Managers, such as Physical Security, EKMS, Anti-terrorism, Force Protection, Foreign Disclosure, Insider Threat, Industrial Security, Traditional Cyber Security, Operational Security, Top Secret, Contracting Security Officer, and NATO Control Officer responsibilities without sufficient and proper structure these functionalities will not be efficiently and effectively managed.

*DESIRED OBJECTIVES OF THE RESEARCH: Headquarters Marine Corps and parent headquarter management have levied additional responsibilities on the Security Managers; but have not provided additional structure. There is a need for standardized structure for Security Management Program.

*REQUESTING/SPONSORING ORGANIZATION: Marine Corps Forces Command / Security

*POINT OF CONTACT: Betty Parker-McCullough

*MAILING ADDRESS: Commander, U.S. Marine Corps Forces Command
1775 Forrestal Drive, Norfolk, Virginia 23551

EMAIL ADDRESS: betty.parkermccullough@usmc.mil

*TELEPHONE NUMBER (757) 836-1550 DSN: 836-1550

FAX NUMBER (757) 836-1568

DESIRED RESEARCH COMPLETION DATE: December 2016

AVAILABLE FUNDING, IF ANY: None