The Marine Coordination and Integration Unit: Laying The Foundation for the Marine Liaison Group

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THE MARINE COORDINATION AND INTEGRATION UNIT: LAYING THE FOUNDATION FOR THE MARINE LIAISON GROUP

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As the United States Armed Forces consider the state of warfare in the 21st Century, they envision a period wrought with regional instability and conflict. The commanders-in-chief of the unified combatant commands are implementing peacetime military engagement programs as deterrence to regional instability. Coalition exercises are an essential component of these engagement programs. If peacetime military engagement fails, the United States intends to resolve regional conflicts through coalition operations, not unilaterally.[1] According to the senior military leadership, the Marine Corps' will play a significant role in future coalition operations.[2]

While the Marine Corps prepares to operate in a coalition environment, it is also experimenting with new technologies and operational concepts. The exploitation of new capabilities, such as digitization and Operational Maneuver From The Sea (OMFTS), creates a dilemma for the Marine Corps because it is rapidly outpacing the military capabilities of most countries.[3] In their study on the conceptual OMFTS force of 2015, the Marine Corps' OMFTS Working Group recognized this growing disparity in capabilities as a challenge to future interoperability with coalition forces. The OMFTS Working Group supported the creation of the Marine Liaison Group (MLG), an organization responsible for interoperability between a MAGTF and coalition forces.[4]

One of the critical interoperability issues for coalition operations is command and control (C2), but the OMFTS Working Group failed to address how the MLG would facilitate C2

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[1]Department of Defense, *1997 National Military Strategy of the United States of America — Shape, Respond, Prepare Now: a Military Strategy for a New Era* (Washington, DC: GPO, 1997), 7-12.

[2] Joint Chiefs of Staff, Concept *for Future Joint Operations: Expanding Joint Vision 2010* (Fort Monroe, VA: Joint Warfighting Center, May 1997), 60.

[3]Operational Maneuver From the Sea is the "Marine Corps' capstone operational concept. It describes, in broad terms, those capabilities that Marines will employ in the chaotic littoral environment of the 21st Century in order to remain the force that is 'most ready when the Nation...is least ready.'" *Final Report of the Operational Maneuver From The Sea Working Group* (Washington, DC: U.S. Marine Corps, March 1999), 3.

[4]*Final Report of the Operational Maneuver From The Sea Working Group,* 15.

interoperability. This paper picks up where the OMFTS Working Group left off by proposing a C2 interoperability concept, the Marine Coordination and Integration Unit (MCIU). The MCIU would facilitate C2 interoperability between a MAGTF and coalition forces. Since the MCIU is a concept, this paper defines the doctrine, organization, personnel, training, and equipment necessary to make the MCIU a reality.

COMMAND AND CONTROL SUPPORT

The advantages of employing a MAGTF in a coalition environment are numerous. Since the MAGTF is task organized, it is adaptable to almost any situation and environment. When forward-deployed, the MAGTF is ready for employment to almost anywhere throughout the world. Finally, the MAGTF is expeditionary; therefore it is self-sustaining and establishes a small footprint where ever it deploys.

Although there are many advantages to employing a MAGTF in a coalition environment, a significant disadvantage is its C2 capabilities. A MAGTF, especially a Marine Expeditionary Unit (Special Operations Capable) (MEU (SOC)) has limited organic communications and information systems, as well as the personnel to support them.[5] Manpower shortages also limit a MAGTF's pool of qualified personnel to serve in liaison capacities. These limitations hinder C2 interoperability with coalition forces. Unfortunately, no organization exists today that specifically supports C2 interoperability between a MAGTF and coalition forces.

Internally, the Marine Corps could receive C2 interoperability support from the Joint Task Force (JTF) Enabler or the Air/Naval Gunfire Liaison Company (ANGLICO). The JTF Enabler provides C2 for the introduction of follow-on forces, but it does not support lateral C2 with

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[5]Marine Corps Warfighting Publication 6-22, *Communications and Information Systems* (Washington, DC: US. Marine Corps, 16 November 1988), 5-37.

coalition forces.[6] The ANGLICO facilitates naval gunfire and naval air support for Army and allied forces, but the Marine Corps recently deactivated all active duty ANGLICO units.[7]

Externally, the Marine Corps could receive C2 interoperability support from the Joint Communications Support Element (JCSE). Under the operational control of the Joint Chiefs of Staff, the JCSE's mission is to provide C2 support for two simultaneous JTFs.[8] Except for large-scale, joint operations, global priorities will most likely preclude JCSE support for MAGTFs conducting coalition operations.

MARINE COORDINATION AND INTEGRATION UNIT

DOCTRINE

The MCIU would fill the void created by the lack of C2 interoperability support for a MAGTF in a coalition environment. The MCIU would facilitate C2 interoperability through coordination and integration. It would not exercise command and control. Effective coordination and integration would depend on the MCIU' s ability to address the human and technical dimensions of C2.

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[6] "The JTF Enabler can provide a JTF, a Marine component, or a MEF Commander an initial, in-theater, immediate, reliable command and control capability. The JTF Enabler includes the GCCS deployment and operations modules, such as JMCIS/TCO module; the CTAPS; the JDISS; and secure electronic messaging. Currently an AN/TSC 93(V) is used for high-capacity, long-haul connectivity. The personnel and equipment are currently provided from the organic assets of the supporting communications battalion. The JTF Enabler allows a JTF, Marine Component, or MEF commander to fall in on assets carried by a forward deployed MEU (SOC) and commence operations immediately. When the MEU commander serves as the combined or joint force commander, the JTF Enabler allows the MEU CE to go ashore (it is a TSC-93 van with SIPRNET, NIPRNET, DISN, IAS). The JTF Enabler allows the MEU commander to exercise command until a JTF commander arrives with follow-on forces." Marine Corps Warfighting Publication 6-22, 5-37.

[7] Michael A. Morris, Major, "ANGLICO: Deep Fires or Deep Six?" *Proceeding*, July 1998, 59.

[8] "The JCSE is an unique communications organization under the operational control of the CJCS. Its primary mission is to provide tactical communications support to two simultaneous deployed JTFs. JCSE resources presently include UHF and SHF SATCOM radios, line-of-sight radios, HF radios, and circuit and message switching." The JCSE consists of an active duty element of about 500 personnel and two Air National Guard Joint Communications Support Squadrons." Joint Publication 6-0, *Doctrine for Command, Control, Communications, and Computer (C4) Systems Support to Joint Operations* (Washington, DC: Joint Chiefs of Staff, 30 May 1995), I-4.

The MCIU would address the human dimension of C2 with liaison personnel, both functional and technical. The liaison personnel would primarily coordinate and integrate through face-to-face communications. They would establish close, professional relationships with their counterparts and maintain these relationships throughout the entire coalition operation. It is through these professional relationships that the MCIU would promote a mutual understanding between a MAGTF and its coalition partners.

The MCIU would address the technical dimension of C2 by establishing linkages between critical communications and information systems nodes. The MCIU's objective would be the coordination and integration of command, control, communications, computers, and intelligence (C4I) systems architectures. The greatest challenge for technical coordination and integration would be developing an architecture that best meets the needs of all coalition participants and still remains transparent to the users. The MCIU will achieve complete technical coordination and integration when all coalition participants receive a Common Tactical Picture.[9]

The MCIU could not maximize coordination and integration without establishing common guidelines and procedures. These guidelines and procedures would synchronize the human and technical dimensions of C2. Since most coalitions are ad hoc, formal agreements on standardization or standing operating procedures (SOPs) are virtually nonexistent. The areas the MCIU should consider are command structures, functional and technical responsibilities, C4I use and integration, information management, equipment requirements, mobility requirements, and

[9] The Common Tactical Picture (CTP) refers to the "current depiction of the battlespace for a single operation within a commander-in-chiefs area of responsibility. The CTP includes current, anticipated or projected, and planned disposition of hostile, neutral, and friendly forces." MAGTF Staff Training Program Pamphlet 6-0.2, *Guide to USMC Command and Control* (Quantico, VA: U.S. Marine Corps, 5 October 1998) 23.

special training.[10] Once approved by the MAGTF and coalition commanders, the guidelines and procedures would become SOPs.

Finally, the MCIU would be deployable. Depending on the mission and the size of the supported MAGTF, the MCIU may deploy with the MAGTF. On other occasions, the MCIU may rendezvous with the supported MAGTF in the area of operation. No matter when the MCIU links up with the MAGTF, it should be deployable by the MAGTF's organic mobility assets.

ORGANIZATION

The MCIU should fall under the command of the Marine Expeditionary Force (MEF) Headquarters Group.[11] Unlike the Marine Forces, the MEF would have the support infrastructure capable of deploying, employing, and sustaining the MCIU. Upon the activation of the Marine Liaison Group, the MCIU would merge with the Marine Liaison Group.

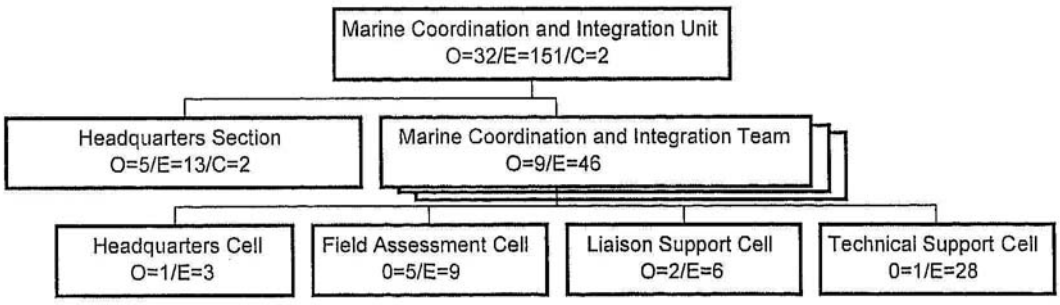

Figure 1

[10] Terry J. Pudas, "Preparing Future Coalition Commanders," *Joint Forces Quarterly*, Winter 1993-94, 42.

[11] The MEF Headquarters Group provides administrative and service support to the MEF Command Element, and to intelligence, counterintelligence, ground reconnaissance, communications and liaison organizations subordinate to the MEF Command Element. Marine Corps Reference Publication 5-12D, *Organization of Marine Corps Forces* (Washington, DC: U.S. Marine Corps, October 1998), 6-5.

Commanded by a Lieutenant Colonel, the MCIU (Figure 1) would consist of a Headquarters Section and three Marine Coordination and Integration Teams (MCIT). The Headquarters Section would direct and supervise all matters pertaining to the administration and training of the MCIU. It would also provide logistic and technical support to the teams, as well as for support not resident within the MCIU. When tasked to support a coalition operation, the Headquarters Section would conduct the initial coordination with the supported MAGTF and assign a MCIT based on anticipated mission parameters. Most importantly, the Headquarters Section would source personnel and equipment, as determined by the MCIT. When the MCIU becomes part of the Marine Liaison Group, the Headquarters Section would merge with Marine Liaison Group's headquarters, reducing the MCIU's personnel requirements.

Each Marine Coordination and Integration Team would have a small Headquarters Cell, a Field Assessment Cell, a Liaison Support Cell, and a Technical Support Cell. Once the MCIU assigns a MCIT to support a coalition operation, the Headquarters Cell would coordinate directly with the supported MAGTF and the coalition forces. The MCIT would be responsible for all external administrative and logistic requirements pertaining to its assigned mission. It would identify manpower and resource deficiencies, and coordinate with the Headquarters Section and the supported MAGTF to resolve the deficiencies. Finally, the Headquarters Cell would coordinate and supervise the MCIT's activities throughout all phases of a coalition operation.

As the MCIT's survey and analysis unit, the Field Assessment Cell would be the backbone of the team. The Field Assessment Cell would conduct surveys of the technical and organizational structure for each participant in the coalition operation, as well as the host nation's communications and information systems infrastructure. These surveys would allow the Field Assessment Cell to identify the disparities and commonalties that affect C2 interoperability.

Based on its analysis, as well as input from the MAGTF and the coalition forces, the Field Assessment Cell would then determine the minimum information requirements for C2 interoperability. Finally, the Field Assessment Cell would assist in developing a common planning process and draft the procedures that would facilitate C2 interoperability. To maintain continuity, members of the Field Assessment Cell would augment the Liaison Support Cell and the Technical Support Cell before the execution phase of a coalition operation.

Once the Field Assessment Cell completes its surveys, the Liaison Support Cell would identify the requirements for supporting the human dimension of C2. Considering the affects of language, culture, religion, and politics on C2 interoperability, the Liaison Support Cell would identify the critical decision-making and coordination nodes. The Liaison Support Cell would then develop an integrated liaison plan and assign qualified liaison personnel to the identified nodes. The Liaison Support Cell would focus on liaison efforts that facilitate coordination and integration, but it would not become the MAGTFs primary source for liaison personnel.

The last cell, the Technical Support Cell, would be responsible for supporting the technical dimension of C2. Armed with the surveys of the different communications and information systems infrastructures and the liaison plan, the Technical Support Cell would design a technical architecture, including operators and technicians, to facilitate coordination and integration. The architecture would validate the use of organic hardware and software employed by a MAGTF, and identify additional hardware or software requirements. If communications and information systems prove incompatible, the Technical Support Cell would develop technical solutions or work-arounds. Based on technical requirements, the architecture could integrate directly within the command posts or serve as an external conduit between command posts. In either case, the architecture would support lateral and higher headquarters connectivity.

Since each coalition operation would have unique C2 interoperability requirements, the MCIU would be an adaptive, matrix organization. In a matrix organization, an individual belongs to a parent organization, but may be assigned to a team outside the parent organization to perform a particular function not resident within the team. At times, an individual could report to two different commanders, the parent organization commander and the team leader.[12] The advantage of a matrix organization is its ability to change its structure to meet unique mission requirements.

PERSONNEL

As a matrix organization, the MCIU's success would depend on the quality and experience of its personnel. Although manned predominately by communications and information systems personnel, the MCIU would require a staff of Marines and civilians with a wide range of capabilities. The MCIU would need Foreign Area Officers (FAO), civil affairs personnel, translators, technicians, and other subject matter experts as may be required.[13] The number of personnel and their Military Occupational Specialties (MOS) would fluctuate depending on mission requirements.

In a matrix organization, unit cohesion and continuity would be difficult to maintain; therefore, the MCIU must have a substantial contingent of permanent personnel (Appendix A). The core of permanent personnel (32 officers, 151 enlisted, and 2 civilians) would consist of active duty Marines and civilians. This core would handle the day-to-day unit responsibilities and form the nucleus for mission support. Based on their technical support requirements, the

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[12] Alvin Toffler, *The Third Wave* (New York: Bantam Books, 1980), 259.

[13] A FAO is an officer who is educated in area-specific languages, military forces, culture, history, sociology, economics, and geography for the purpose of filling billets that requires special expertise in those localities. As of September 1997, there was only 208 FAOs on active duty. Major Clavin D. Peters, "CPR for the Marine Corps' Moribund Foreign Area Officer Program," *Gazette,* September 1997, 60.

Headquarters Section and the Technical Support Cell would have the largest number of permanent personnel. The other two cells would maintain smaller contingents of permanent personnel because they require people with narrow skill sets for short periods of time.

To flush out its manning requirements, the MCIU would source augmentees from the Total Force (active duty Marines, reserve Marines, and civilians) based their expertise and experience (Appendix B). As an organization of the MEF Headquarters Group, the MCIU could source active duty personnel from the MEF's organic units. The MCIU could source communications and information systems personnel from the communications battalion and translators from the interrogator/translator platoon of the counterintelligence/human intelligence company. Additionally, it could source personnel from the division's communications company, the wing's communications squadron, and the Force Service Support Group's communications company. Finally, the MCIU could source active duty personnel and civilians from the Supporting Establishment.

The MCIU would not source all its personnel from the active duty forces. Reserve units, such as the 6th Communications Battalion, the 3rd and 4th Civil Affairs Groups, the 3rd and 4th ANGLICO, and the five reserve interrogator-translator teams, could become a source of qualified personnel for augmenting the MCIU. Although the MCIU could source personnel from established reserve units, it could also establish an Individual Mobilization Augmentee detachment tasked specifically with supporting the MCIU. Or it could source reservists through the Active Duty Special Work Program, which assigns reserve Marines to active duty for 179 days or less.[14]

[14] Luke Danciu, Major, USMC, Reserve Force Structure, Manpower Division, Headquarters, U.S. Marine Corps, telephone interview, 26 March 1999.

Finally, based on the threat level, the Marine Corps should consider contracting civilians to support the MCIU. Civilian technicians should be the subject matter experts (SMEs) on their product and could assist the MCIU in resolving difficult interoperability issues. Additionally, if language or country specialists are unattainable from the Total Force, the Marine Corps should consider contracting regional area experts. In hostile environments, the MCIU could virtually staff its teams with qualified civilians.

TRAINING

Once the MCIU sources qualified personnel, it must provide training based on specific team coordination and integration requirements. Liaison personnel should demonstrate a high level of proficiency for specific regions or countries. They should also understand military doctrines, including terminology and symbology.[15] Considering the limited pool of foreign area experts, implementing a modified version of the FAO training program for officers, enlisted, and civilians assigned to the MCIU would enhance the MCIU's capabilities. The training would include the languages, religions, politics, histories, cultures, and military doctrines of specific regions and countries. The training and expected level of proficiency would correlate with an individual's duties within the MCIU.

Since the communications and information systems of the future will demand highly skilled personnel, the MCIU would need a comprehensive training plan for establishing and sustaining technical proficiency levels. The training would include technical engineering, field assessments and surveys, and communications and information systems. In addition to understanding Marine Corps specific communications and information systems, MCIU personnel should train with

[15] Robert W. Riscassi, "Principles for Coalition Warfare," *Joint Forces Quarterly*, 69.

equipment related to specific countries or regions of the world. Achieving an understanding of foreign communications and information systems would ease technical integration problems.

Current and anticipated information technologies should support training the matrix organization. Capitalizing on the efficiencies of simulations, permanent personnel and augmentees would train in virtual environments using simulations that replicate coordination and integration architectures. In addition to simulations, distance learning capabilities would allow for on-demand training, permitting personnel to receive timely training from any location. Using the virtual training environment, geographically separated personnel could receive similar training and achieve a common level of situational awareness.

EQUIPMENT

Although the MCIU' s technical architecture would require significant flexibility, the equipment it employs should not be different than the equipment employed by a MAGTF. Initially, the architecture should include analog, as well as digital communication mediums. However, the MCIU would incorporate new technologies that support a completely digital, wireless network, augmented by cellular communications. Instead of large desktop configurations, the MCIU should rely solely on laptop, palmtops, and hand-held communications assets. The lack of hard-wire connectivity and the use of miniaturized equipment would keep the architecture adaptable and mobile.

In every coalition operation, the MCIU can expect to encounter different hardware and software compatibility issues. Therefore, the MCIU should employ Commercial-Off-The-Shelf (COTS) equipment within a Common Operating Environment (COE). Combining COTS and a COE allows the MCIU to use commercial communication standards and common functions, not

unique military standards and functions.[16] The use of commercial standards and common functions would reduce the likelihood of software and hardware incompatibility between a MAGTF and coalition forces.

As for applications, the MCIU should avoid the current "stovepipe" C2 applications and employ a PC-based, integrated C2 tactical application. The best choice for the MCIU architecture would be a multi-functional, robust version of the current Command and Control Personal Computer (C2PC). The modified C2PC would have capabilities similar to the myriad of functional applications available today. It would permit commanders to visualize the battlefield in a common environment, achieving the Common Tactical Picture.

A future C2PC could not achieve a Common Tactical Picture in a coalition environment without state-of-the-art translation programs. Using advanced artificial intelligence, these translation programs would automatically convert text and voice communications. Not only would these programs translate native languages, but they would also address significant dialects and slang. Additionally, these translation programs would automatically convert and display the appropriate doctrinal symbology for each commander and staff. Both the language and military translation programs would require extensive databases designed to support specific coalition operations. Integrating these programs into the coordination and integration architecture would increase the timely flow of information between units and would reduce decision-making cycles.

For internal support, the MCIU technical architecture would employ satellite communications that facilitate reachback. When necessary, the Liaison Support Cell could access academic, diplomatic, corporate, and military sources outside the area of operations for

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[16] Frank M. Snyder, *Command and Control: The Literature and Commentaries* (Washington, DC: National Defense University, 1993), 108.

support on regional issues. At the same time, the Technical Support Cell could interface directly with technical support centers, both military and civilian. Through reachback, the MCIU would increase its network of subject matter experts.

Finally, the MCIU must consider mobility requirements when developing the technical architecture. At a minimum, the MCIU must have the same mobility as the most mobile force in the coalition. It is unlikely that large trucks or communications vans could effectively support the MCIU's mobility requirements. Since new technologies should reduce manpower and equipment requirements, the MCIU could use sheltered all-terrain vehicles or vehicles similar to the Light Armored Vehicle — Command and Control variant.

CONCLUSION

Although the Marine Corps could create the MCIU today, three issues could hinder its development. The first issue would be fiscal limitations. As already stated, the Marine Corps wants to incorporate advanced technologies that will enhance the MAGTF's warfightng capability. Not only would the Marine Corps need to provide new equipment to organizations responsible for C2, but also to the MCIU to facilitate C2 interoperability. This redundancy is inherent to the MCIU's mission. Further complicating the issue, the MCIU would need to maintain older equipment in order to remain backward compatible with technically deficient coalition forces. Both redundancy and backward compatibility would be costly and inefficient, but there is no easy solution if the Marine Corps continues to exploit new technologies.

Another issue that could affect the MCIU' s development would be the dissemination of intelligence to coalition partners. The sharing of intelligence is severely restrictive, especially with countries the United States does not have formal security agreements. Although coalition forces could access open source information and external intelligence sources on their own, the

MCIU would find it impossible to establish a true Common Tactical Picture without some level of intelligence sharing. The sharing of intelligence with coalition forces would require formal agreements established at the highest levels of military leadership.[17]

The final issue that could restrict the MCIU's development would be manpower limitations. The Marine Corps expects its force structure and end strength to remain relatively the same in the next decade.[18] Where would the Marine Corps get the permanent personnel to man the MCIU? The MCIU would have to compete for personnel in a zero-sum enviromnent, where increases in the size of one organization must correspond to decreases in other decreases in other organization. This poses a problem for the MCIU, which requires high caliber people with narrow skill sets. These individuals are normally part of extremely small, but highly sought after MOS populations. Furthermore, most organizations may be reluctant to share their high caliber people as necessary to support a matrix organization. The battles over manpower could greatly impede the MCIU's future.

To become a reality, the MCIU would require a significant commitment of already limited resources. The initial outlay for the MCIU would be high, but the long-term benefits of such an organization for the Marine Corps and the United States would be invaluable. If the future promises an increase in regional conflicts and the United States feels politically constrained from acting unilaterally, the Marine Corps must be prepared to work efficiently with coalition forces.

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[17] Chairman of the Joint Chiefs of Staff Instruction , *Military Telecommunications Agreements and Arrangements between the United States and Regional Defense Organizations or Friendly Foreign Nations* (Washington, DC: Joint Staff, 18 September 1996) A-5.

[18] Commandant of the Marine Corps, Letter to Brigadier General Robert R. Blackman, Jr., "Force Structure Planning Group 1999 Appointing Letter and Charter," not dated.

By facilitating C2 interoperability with coalition forces, the MCIU would help the Marine Corps and the United States demonstrate their commitment to regional security. Although the MCIU concept does not address all interoperability issues, it does lay the foundation for the Marine Liaison Group.

Appendix A: MCIU Table of Organization (Proposed)

Title	Rank	MOS	Auth
Headquarters Section			
Commanding Officer	O5	0602	1
Executive Officer	O4	0602	1
Operations Chief	E9	0699(1)	1
Operations NCO	E5	8441	1
Personnel Chief	E5	0121	1
Personnel Clerk	E1/E2	0121	1
Admin Clerk	E1/E2	0151	1
Logistics Chief	E5	0431	1
Supply/Admin Clerk	E3	3043	1
Warehouse Clerk	E1/E2	3051	1
Driver	E1/E2	3531	3
Data Systems Software Officer	O3	4010	1
Network Management Officer	O3	2510	1
Air Command and Control Officer	O2	7202	1
Civilian (Network Analyst)			1
Civilian (Programming Analyst			1
Marine Coordination and Integration Team Headquarters Cell			
Team Leader	O4	0602	3
Team Chief	E7	8441	3
Supply/Admin Clerk	E5	0343	3
Admin Clerk	E1/E3	0151	3
Field Assessment Cell			
Cell OIC	O3	0602	3
Cell SNCOIC	E8	0669	3
Foreign Area Officer	O3	994X	3
CIS Officer	O2	0602	3
Intelligence Specialist	E5	0231	3
Communications Engineer	O2	9636	3
Civil Affairs Officer	O2	0107	3
Advanced Network Specialist	E6	0668	3
Data Network Specialist	E4	0661	3
Small Computer Systems Specialist	E1/E3	0651	6
Radio Communications Chief	E6	0637	3
Wire Communications Chief	E6	0619	3
Advanced Application Programmer	E6	0672	3
Information Security Specialist	E6	0675	3

Appendix A: MCIU Table of Organization (Proposed)

Title	Rank	MOS	Auth
Liaison Support Cell			
Cell OIC	O3	9911	3
Cell SNCOIC	E7	0369	3
Foreign Area Officer	O3	994X	3
Civil Affairs NCO	E4/E5	8441	3
Intelligence Specialist	E4	0231	3
Interpreter	E3	8611	9
Technical Support Cell			
Cell OIC	O3	0602	3
Cell SNCOIC	E8	0669	3
Radio Communications Chief	E6	0637	3
Unit Level Switch Operator	E1/E3	0615	9
Construction Wireman	E1/E3	0613	3
Field Wireman	E1/E2	0612	3
Field Radio Operator	E1/E3	0631	9
HF Comm Central Operator	E3	0634	9
SATCOM Terminal Operator	E4	0635	6
Multi-channel Radio Operator	E1/E3	0632	9
Information Systems Chief	E7	0669	3
Data Network Systems Specialist	E4	0661	3
Data Network Systems Specialist	E1/E3	0661	3
Advanced Network Specialist	E6	0668	3
Small Computer Systems Spec	E1/E3	0651	9
Advanced Application Programmer	E6	0672	3
Application Programmer	E5	0667	3
Information Security Specialist	E7	0675	3

Total Officers: 32
Total Enlisted: 151
Total Civilians: 2

Note 1: The T/O uses proposed enlisted Communications and Information Systems 06XX MOSs.

Appendix B
Possible MCIU Augmentation

1. The following MOSs reflect possible augmentees for the MCIU. This list does not preclude additional augmentation for MOSs identified in Appendix A.

Title	MOS
Regional Affairs Officer	9821-29
International Relations Officer	9676
Interrogation-Translation Specialist	0251
Information Systems Management Officer	9646
C3 Systems Officer	9656
Radio Frequency Management Technician	0681
Data Communications Maintenance Chief	2891
Data Communications Maintenance Officer	2805
Computer Technician	2821
Ground Radio Repairman	2841
SATCOM Terminal Technician	2833
Multi-channel Equipment Repairman	2831
Electronic Switching Equipment Technician	2822
Utilities Chief	1169
Electrical Equipment Specialist	1142
Messaging Systems Specialist	0657

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