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ADAPTING COMMAND AND CONTROL FOR THE UNITED STATES FLEET

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The Navy and Marine Corps possess effective and complementary capabilities defined by the character of maritime warfare that contribute to the missions of sea denial and sea control, but in recent decades those capabilities have routinely been employed as separate entities in an artificially divided battlespace. This paper examines how the Naval Force should build an effective operational command organization and common tactical command and control architectures that will enable the integration of Navy-Marine Corps capabilities in order to accomplish sea denial and sea control in the littorals.. In order to integrate the 21st century Naval Fleet, Department of the Navy must establish standing Navy- Marine Corps Task Forces under operational control of the Fleet Commander and incorporate the Fleet Marine Force (FMF) into the Composite Warfare Command (CWC) organization at the tactical level.

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Table of Contents

	Page
DISCLAIMER	ii
EXECUTIVE SUMMARY	iv
GLOSSARY	viii
INTRODUCTION	1
DEVELOPMENT OF NAVAL COMMAND ORGANIZATION	4
NAVY COMMAND AND CONTROL	9
FUTURE AMPHIBIOUS COMMAND ARRANGEMENTS	14
CONCLUSION	23
BIBLIOGRAPHY	26

Executive Summary

Title: Adapting Command and Control for the United States Fleet

Author: Lieutenant Commander Joseph Phillips, United States Navy

Thesis: The Navy and Marine Corps lack the common command and control structure necessary to establish unity of command and enable the joint effort for sea denial and sea control operations required in the littorals. In order to integrate the 21st century Naval Fleet, Department of the Navy must establish standing Navy- Marine Corps Task Forces under operational control of the Fleet Commander and incorporate the Fleet Marine Force (FMF) into the Composite Warfare Command (CWC) organization at the tactical level.

Discussion: The key terrain for global power competition in the maritime domain is the littoral regions. For that reason, the U.S. Naval Forces are the DoD's critical capability to seize the initiative and expand the competitive space. The Navy and Marine Corps possess effective and complementary capabilities defined by the character of maritime warfare that contribute to the missions of sea denial and sea control, but in recent decades those capabilities have routinely been employed as separate entities in an artificially divided battlespace. This paper examines how the Naval Force should build an effective operational command organization and common tactical command and control architectures that will enable the integration of Navy-Marine Corps capabilities in order to accomplish sea denial and sea control in the littorals.

Naval command and control for amphibious operations in recent decades has focused on two co-equal commanders in a supported-supporting relationship coupled to specific phases of the amphibious operation. Future command arrangements must allow for scalable, flexible, and agile command and control models that are not constrained by this current force structure. The creation of a standing integrated Navy-Marine Corps Task Force under the fleet commander would produce a unified command structure with the ability to task organize to the proper scale; permit flexibility for rapid shifts in command relationships; facilitate centralized planning, and drive cooperative technological innovation

At the tactical level, integration of the FMF into the CWC will provide a common C2 architecture that connects *inside* and *outside* forces required to produce effects from Navy-Marine complementary capabilities. Future wargames, exercises, and experimentation should inject marine forces into these roles to determine the most effective ways to integrate capabilities that will facilitate simultaneous offensive and defensive combat operations against multiple threats in each of the warfare domains. Results will inform DOTMLPF changes required to develop common tactics, techniques, and procedures needed to effectively aggregate the fleet and select fleet Marine force units.

Conclusion:

Re-organization of Navy and Marine forces at the operational level and incorporation of the FMF into the CWC construct will promote a more flexible C2 architecture allowing the Navy and Marine Corps to integrate the 21st century fleet to be the persistent naval forward presence required to compete in the maritime domain.

Glossary

AMDC	Air and Missile Defense Commander
AOA	Amphibious Operating Area
AOMSW	Air Operations in Maritime Surface Warfare
AOR	Area of Responsibility
ARG	Amphibious Ready Group
ASUW	Anti-Surface Warfare
ASW	Antisubmarine Warfare
AWS	Aegis Weapon System
C2	Command and Control
C3F	Commander, Third Fleet
C7F	Commander, Seventh Fleet
CATF	Commander amphibious Task Force
CCDR	Combatant Commander
CINCUS	Commander in Chief, U.S. Fleet
CLF	Commander Landing Force
CNO	Chief of Naval Operations
COCOM	Combatant Command
CVBG	Carrier Battle Group
CSG	Carrier Strike Group
CWC	Composite Warfare Commander
DMO	Distributed Maritime Operations

DOTMLPF	Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities
EAB	Expeditionary Advanced Basing
EABO	Expeditionary Advance Base Operations
ESG	Expeditionary Strike Group
EXWC	Expeditionary Warfare Commander
F2T2EA	Find, Fix, Track, Target, Engage, Assess
FM	Field Manual
FMF	Fleet Marine Forces
GCC	Geographic Combatant Commander
JAM-GC	Joint Concept for Access and Maneuver in the Global Commons
JFLCC	Joint Force Land Component Commander
JFMCC	Joint Force Maritime Component Commander
LCG	Littoral Combat Group
LOCE	Littoral Operations in a Contested Environment
MARFOR	Marine Forces Command
MCDP	Marine Corps Doctrine Publication
MEB	Marine Expeditionary Brigade
MEF	Marine Expeditionary Force
MEU	Marine Expeditionary Unit
NDP	Naval Doctrine Publication
NDS	National Defense Strategy
NECF	Naval Expeditionary Combat Force
NWP	Naval Warfare Publication

OODA	Observe, Orient, Decide, Act
OPCON	Operational Control
OTC	Officer in Tactical Command
PACSAG	Pacific Surface Action Group
SAG	Surface Action Group
SECNAV	Secretary of the Navy
STWC	Strike Warfare Commander
TACON	Tactical Control
TADIL	Tactical Data Link
TF	Task Force
TG	Task Group
TU	Task Unit
UCC	Unified Combatant Commander
WEZ	Weapons Engagement Zone

Introduction

The *2018 National Defense Strategy* recognizes the “current central challenge to U.S. prosperity and security as the reemergence of long-term, strategic competition”, and it has charged the Department of Defense (DoD) to build the combat-credible forces needed to deter and win war.¹ The key terrain for global power competition in the maritime domain is the littoral region. The littorals represent the area from which all seaborne trade originates and it contains strategic chokepoints controlling sea lines of communication.² For that reason the U.S. Naval Forces are the DoD’s critical capability to seize the initiative and expand the competitive space.

The Navy and Marine Corps possess effective and complementary capabilities defined by the character of maritime warfare. Sea-based and land-based capabilities provided by both services contribute to the missions of sea denial and sea control, but in recent decades those capabilities have routinely been employed as separate entities in an artificially divided battlespace.³ This paper examines how the integrated Naval Force should build an effective operational command organization and common tactical command and control (C2) architectures enabling the integration of Navy and Marine Corps’ land and sea-based capabilities in order to accomplish sea denial and sea control in the littorals.

The Navy and Marine Corps lack the common command and control structure necessary to establish unity of command and enable the joint effort for sea denial and sea control operations required in the littorals. In order to integrate the 21st century Naval Fleet, Department of the Navy must establish standing Navy- Marine Corps Task Forces under operational control

¹ US Department of Defense. *2018 Summary of the National Defense Strategy of the United States of America* (Washington, DC, 2018), <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>, 2.

² Headquarters US Marine Corps, *Expeditionary Operations*, MCDP 3-0 (Washington, DC: Headquarters US Marine Corps, April 16, 1998), 21.

³ Department of the Navy, *Littoral Operations in a Contested Environment*, (Washington, DC: Department of the Navy, 2017), 7.

of the Fleet Commander and incorporate the Fleet Marine Force into the Composite Warfare Command organization at the tactical level. Re-organization, supported by agile command relationships and reinforced by mission command, will promote a more flexible C2 architecture and allow the persistent naval forward presence required to compete in the maritime domain.

Research Design

Research for this paper took place in two parts. Part one utilized fleet experience acquired over the past 24 years of naval service. The experience gained while operating within the Commander Amphibious Task Force/Commander Landing Force structure and multiple variations of the Composite Warfare Command construct provided perspectives that facilitated analysis of current scholarship and professional military writing on current naval integration efforts. It also contributed real-world observations based on experience in Amphibious Ready Groups, Carrier Strike Groups, and Surface Action Groups that allowed comparison of past force composition and integration efforts with emerging Navy and Marine Corps force design initiatives. The second part of the research involved testing and analysis of blended amphibious command and control structures in accordance with the Littoral Operations in a Contested Environment and Expeditionary Advanced Base Operations in the wargame setting. Tests conducted during the Marine Corps Warfighting Laboratory's *Ghost Fleet* wargaming program in January 2020 allowed experimentation with re-organization of forces at the operational level and integration of the marine forces into the CWC in both the contact and blunt layers of power competition. The wargame exposed vulnerabilities in current operational and tactical command and control architectures and validated the proposed changes in this paper.

Concept of Command and Control

“War is the realm of uncertainty; three-quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty...the commander must work in a medium which his eyes cannot see; which his best deductive powers cannot always fathom; and with which, because of constant changes, he can rarely become familiar.”⁴

Warfighting at the operational and tactical level is made up of a multitude of interconnected complex systems, each of which’s parts act independently depending on situation and circumstance. Actions by each part of the system affect the entire system through their web of interaction, and create behavioral factors that are extremely difficult to predict. The uncertainty of these factors, what Clausewitz termed the “fog of war”, can have pivotal impacts on the outcome of a military operation. Command and control is the mechanism that helps mitigate that uncertainty.

Joint Publication 3-0, Joint Operations, describes command and control as “the exercise of authority and direction by a commander over assigned and attached forces to accomplish the mission”.⁵ In order to understand the C2 concept as whole it should first be examined as separate parts.

Control is the method in which command is communicated. It specifies the structure and processes (e.g. facilities; personnel; planning and operating procedures; and direction and coordination of resources) required to accomplish the mission safely and efficiently. Command is the human element. It grants the authority, responsibility, and accountability for the employment of resources and relies on the ability to motivate and direct an organization to solve complicated and unexpected operational and tactical problems. As a whole, command and control within this inherently complex system is the key to understanding and coping with

⁴ U.S. Marine Corps. *Command and Control*. Marine Corps Doctrine Publication (MCDP) 6. (Washington, DC: Headquarters, United States Marine Corps, 2018), 45.

⁵ Joint Chiefs of Staff, *Joint Operations*, JP 3-0 (Washington, DC: Joint Chiefs of Staff, January 17, 2017), III-2.

unexpected factors, adapting to changing conditions, making decisions, and taking decisive actions at the critical time.

Development of Naval Command Organization

Emerging security threats and modernization of weapons and technology have driven the Navy and Marine Corps to transform force design and adapt command organization throughout its history. Today's current security environment along with exponential advancements in capability once again necessitate the two sister services evolve. This chapter will discuss changes in the modern history of Navy and Marine Corps command organization and examine the development of command relationships within those organizations in order to understand how to re-organize and develop a command structure that will effectively employ complementary capabilities in the future operational environment.

Amphibious Doctrine: In 1933 *General Order No 241* authorized the creation of the Fleet Marine Force (FMF) as the marine contingent trained and equipped to deploy aboard capital ships in support of amphibious operations inherent in naval warfare. "The force of marines...in a state of readiness for operations with the fleet is hereby designated the Fleet Marine Force," directed to "...be available to the Commander-in-Chief for operations with the Fleet or for exercises either afloat or ashore in connection with Fleet problems."⁶ The expeditionary nature of the FMF primary mission differed very little from that of Marine Corps Expeditionary Forces from which it was developed, except that it placed the FMF under the

⁶ The Fleet Marine Force, General Order No. 241, SECNAV, 7 Dec 1933.
<https://www.usmcu.edu/Research/Marine-Corps-History-Division/Frequently-Requested-Topics/Historical-Documents-Orders-and-Speeches/The-Fleet-Marine-Force>.

operational control (OPCON) of the Commander in Chief, U.S. Fleet (CINCUS).⁷ Amphibious assault to seize fleet bases across well-defended beaches remained the main mission for the Marine Corps.⁸ However, an OPCON relationship to the Fleet commander provided the authority to employ FMF assigned forces and authorized the organization of those commands necessary for integration within the fleet.⁹ The Secretary of the Navy (SECNAV) was intentional in his explicit direction that the FMF would be available for “exercises in connection with Fleet problems”, and the CINCUS wasted no time in flexing his new authorities.¹⁰ The 1934 Fleet Problem XV exercise incorporated FMF in training for tactical objectives in the defense of the Panama Canal, capture of advanced bases, and a major fleet engagement.¹¹ The Navy-Marine Corps team worked together in these annual exercises and in their respective military educational institutions throughout the rest of the decade to develop modern amphibious doctrine. *The Tentative Manual for Landing Operations* and its Navy successor, *FTP 167- Landing Operations Doctrine*, defined command organization and produced tactics and techniques for combined execution of amphibious capabilities that proved effective in World War II. Command relationships within those amphibious operations, however, needed refinement that would take place over the course of the war and in the conflicts that would follow.

CATF/CLF: The scale of operations in WWII required the Navy to allocate its operating forces into a designated system of numbered fleets. Second Fleet was resourced by the Atlantic

⁷ MG John H. Russell, “The Fleet Marine Force,” United States Naval Institute. *Proceedings* 62, no. 144 (October 1936), 3, <https://www.usni.org/magazines/proceedings/1936/october/fleet-marine-force>.

⁸ Gunther E. Rothenburg, “From Gallipoli to Guadalcanal,” in *Assault from the Sea: Essays on the History of Amphibious Warfare*, edited by Merrill L. Bartlett (Annapolis: Naval Institute Press, 1983), 178.

⁹ Joint Chiefs of Staff, *Command and Control of Joint Maritime Operations*, JP 3-32 (Washington, DC: Joint Chiefs of Staff, June 8, 2018), I-1.

¹⁰ The Fleet Marine Force, General Order No. 241, SECNAV, 7 Dec 1933. <https://www.usmcu.edu/Research/Marine-Corps-History-Division/Frequently-Requested-Topics/Historical-Documents-Orders-and-Speeches/The-Fleet-Marine-Force>.

¹¹ Albert A. Nofi, *To Train the Fleet for War: The U.S. Navy Fleet Problems, 1923-1940* (Newport, RI: Naval War College Press, 2010), 177-190.

Fleet Commander (LANTFLT) for operations in the European theater. The Pacific Fleet Commander (PACFLT) divided areas of operation into the Central Pacific and Southwest Pacific—Fifth Fleet and Seventh Fleet respectively. Amphibious operations in each theater modified doctrine regarding command organization and relationships throughout the war.¹² Adaptations in doctrinal relationships between land-based and sea-based assault forces are highlighted in the Central Pacific campaign as large-scale operations were conducted against opposed Japanese-controlled island bases across the vast distances of the Micronesia.

Admiral Spruance, Commander Fifth Fleet, structured his forces into functional components by delegating command authority based on capability. Admiral Marc Mitscher was given command of the Fast Carrier Task Force 58 to seek out and engage the Japanese Fleet. Admiral Kelly Turner and Major General Holland Smith split amphibious operations into co-equal commands. Turner's Expeditionary Task Force 51 was in charge of all shipping and sea control in the amphibious operating area, while Smith commanded the assault forces of Task Force 56.¹³ Division of command over the forces to accomplish both the sea and land-based missions in the same operating area became a point of contention between the two officers as each wanted control of the amphibious troops. Spruance resolved the dispute by initiating a system, now defined in doctrine as Commander Amphibious Task Force (CATF) and Commander Landing Force (CLF), that separated control of forces by distinct phases in the amphibious operation.¹⁴ The Marine commander, CLF, would command the landing force once

¹² Donald Chisholm, "Negotiated Joint Command Relationships: Korean War Amphibious Operations, 1950," *Naval War College Review*, Spring 2000, 117.

¹³ James D. Hornfischer, *The Fleet at Flood Tide: America at Total War in the Pacific 1944-1945* (New York: Bantam Books, 2016), 23.

¹⁴ JP 3-02, III-1.

his headquarters was established ashore. Until that time, the Navy commander, CATF, would command all assault forces involved in the mission.¹⁵

This arrangement worked well during the landing phase of operations as both the amphibious forces and navy shipping worked together to achieve mutual tasks involved with putting marines ashore. However, the command relationships became strained once the ground assault began. Navy assets tasked with providing fires and logistic support to the assault force were simultaneously challenged with the Japanese blue water threat. Operations at Guadalcanal and Leyte Gulf are examples of this dilemma when Navy commanders decided to forgo their supporting role to the land forces in order to protect the carrier battle groups or withdraw in order to pursue the enemy naval force.

Despite these relationship challenges, the CATF/CLF organization was codified in victories across the Pacific. Its principles were adopted by the European theater, as seen in the Operation Plan for the Normandy invasion, “Until the Army is firmly established ashore, the command of each naval task and assault force of the military formations will be exercised by the naval commanders.”¹⁶ Practical service during WW II evolved doctrine and formed a body of experience that made CATF/CLF the default command structure for amphibious operations that would follow.

Numbered fleets were dissolved at the end of WW II, but they were reactivated numerous times throughout the Cold War in response to major contingencies and hot wars.¹⁷ Seventh Fleet was utilized as the principal command organization for naval operations in the western Pacific to

¹⁵ Sharon T. Lacey, *Pacific Blitzkrieg: World War II in the Central Pacific* (Denton, TX: University of North Texas Press, 2013), 57-58.

¹⁶ W. H. P. Blandy, “Command Relations in Amphibious Warfare,” United States Naval Institute. *Proceedings* 77, no. 580 (June 1951), <https://www.usni.org/magazines/proceedings/1951/june/command-relations-amphibious-warfare>.

¹⁷ Naval Heritage and History Command, Establishment of Numbered Fleets. Accessed 31 May 20. <https://www.history.navy.mil/browse-by-topic/wars-conflicts-and-operations/world-war-ii/1943/establishment-of-numbered-fleets.html>.

include the wars in Korea and Vietnam. Between June 1950 and January 1951, successful amphibious operations in Korea were conducted at Pohan-Dong, Inchon, Wonsan-Iwon, and Hungnam-Wonsan-Songjin-Inchon-Chinnampo.¹⁸ There was very little conflict in the command relationships at the tactical level between the services. For example, no problems existed about passing command from the attack force to the landing force commander.¹⁹ However, there were still difficulties establishing commanders and their relationships at the operational level of planning that doctrine did not address. The same complications seen at Guadalcanal and Leyte were revealed while planning Pohan and Inchon. Carrier admirals were still hesitant to tie-down their assets to an AoA and reluctant to take orders from amphibious commanders. Friction among the competing commands precluded continuity of operations throughout the war as command relationships altered with each operation. Despite those complications, successful operations occurred mainly due to the informal command relationships developed by extremely professional officers with high levels of experience from the previous war.

The nature of amphibious warfare changed following Korea. The emerging approach of unconventional warfare, like terrorism and guerrilla warfare, along with the growing threat of nuclear weapons changed the strategic context and made amphibious assault less useful. Large Carrier Battle Groups (CVBG) carrying regimental sized landing forces were no longer viable against an enemy that based its strategy on avoiding battle against concentrated forces. The Amphibious Ready Group (ARG) concept, consisting of three to four amphibious landing/transport ships and an infantry battalion landing team, was proven during sixty-two amphibious assaults in South Vietnam.²⁰ The assaults, although mostly ineffective due to the fact

¹⁸ Chisholm, 65.

¹⁹ Ibid, 115.

²⁰ Carter A. Malkasian, *Charting the Pathway to OMFTS: A Historical Assessment of Amphibious Operations from 1941 to the Present*. Center for Naval Analyses (2002), 34.

that they involved insignificant contact with the enemy, demonstrated increased mobility and depth by adding attack helicopters as an organic capability to the ARG and landing force.²¹ This new capability meant amphibious forces could operate without as much reliance on air and fire support from Navy and Air Forces. Over the following decades, while the OPCON relationship to the Fleet Commander was still in place, amphibious operations were more frequently conducted outside of larger naval formations. The supported/supporting commander concept began to mature as a temporary solution to OPCON/TACON challenges inherent in the CATF/CLF structure. Although the process of shifting command from sea to shore is rigid and slow, it continued to evolve independently of command and control constructs that governed the larger Naval Force.

Navy Command and Control

The Navy-Marine Corps operational level C2 relationship became further complicated in 1986 when the *Goldwater-Nichols Act* re-organized the department of defense under the joint concept that we still employ today. It established Unified Combatant Commands (UCC) organized on the basis of a geographic Area of Responsibility (AOR) or on a functional basis, such as; special operations, strategic operations, or transportation operations. The UCC, led by a four-star flag or general officer Combatant Commander (CCDR), exercises command authority (COCOM) over all U.S. military forces within its area regardless of service type.²² This re-organization divided Navy and Marine Corps into separate component commands, thereby delegating OPCON of Marines to the numbered fleet commands only when forces are embarked. The security environment over the past twenty years has directed a majority of marine forces

²¹ Ibid, 34.

²² Joint Chiefs of Staff, *Doctrine for the Armed Forces of the United States*, JP 1-0 (Washington, DC: Joint Chiefs of Staff, July 12, 2017), II-9-11.

controlled by the Joint Force Land Component Command (JFLCC) to fight regional land conflicts in the Middle East. Consequently, the FMF not only diminished in size, it created a paucity of personnel with experience to integrate capabilities into growing naval command and control structures like the Joint Maritime Component Commander (JFMCC) and the Navy's Composite Warfare Command (CWC) constructs.

CWC: Like amphibious doctrine and the CATF/CLF command structure, the composite warfare organization was developed due to the emerging threat in the security environment and advancements in technology and capability. The CWC concept established an architecture that provides coordination across separate warfare domains based on centralized planning and decentralized execution espoused in the philosophy of mission command.

During the Cold War, Soviet improvements to air and naval forces capable of multi-mission operations against the U.S. Navy at extended ranges led to the rapid proliferation of air, surface, and subsurface threats in the blue water environment. Concurrently, the U.S. Navy competed with advancements in its own multi-use weapons and multi-mission ships. Development of the Tomahawk land-attack missile, next-generation fighter-attack aircraft and air-launched weapons brought increased strike capability to battlegroups. The invention of the Aegis Weapon System (AWS), Tactical Data Links (TADIL), and the enhancement of sonar signal processing fused sensor improvements with communication networks that expanded the air, surface, and subsurface battlespace and provided a common operational picture at every echelon of command.²³

By the late 1970's the U.S. fleet had capabilities to conduct simultaneous operations across multiple warfare domains. However, the ability to control individual units to conduct

²³ James B. Hattendorf, "The Evolution of the U.S. Navy's Maritime Strategy, 1977-1986," *Naval War College Newport Papers* 19 (2003), 14.

those operations had outgrown the span of control for a single CVBG or Surface Action Group (SAG) commander. To solve that problem, CWC was developed as a flexible C2 structure that allowed commanders to tailor task organization of their forces based on the mission requirements and control them through the concept of decentralized execution.

The CWC framework is a pyramid shape (see fig. 1).²⁴ Each layer of the pyramid executes command decision cycles linked to the layer above and below.²⁵ The Officer in Tactical Command (OTC) sits at the top of the pyramid and his span of control narrows or widens depending on the number of layers in the structure and the amount of decision-making authority delegated to each layer. The following layer is the Composite Warfare Commander who is on scene in the Area of Operations (AoA) and has tactical control of all offensive and defensive functions of the forces. The next subordinate layer contains the Warfare Commanders. They are delegated warfighting functions commensurate to specific warfighting missions (i.e. air and missile defense, strike warfare, surface warfare, etc.) The layer below the Warfare Commanders contains the Functional Group Commanders. Each of these commanders conduct specific activities to support the OTC (i.e. ballistic missile defense, maritime interdiction operations, mine interdiction warfare, etc.). Decentralized execution allows the commander to regulate his or her span of control across multiple domains of warfare, thus creating unity of command and enabling unity of effort throughout the entire group. The science of control inherent in the CWC structure is effective because it facilitates command relationships based on the philosophy of mission command. Mission command has remained the foundation for Navy command and control since before World War II when Admiral Ernest King advocated for decentralized

²⁴ U.S. Office of the Chief of Naval Operations. *Composite Warfare Doctrine*. Navy Warfare Publication (NWP) 3-56. (Washington, D.C.: December 2015), 1-6.

²⁵ *Ibid*, 1-6.

philosophy that would “...extend the knowledge and practice of ‘initiative of the subordinate’ in principle and application.”²⁶

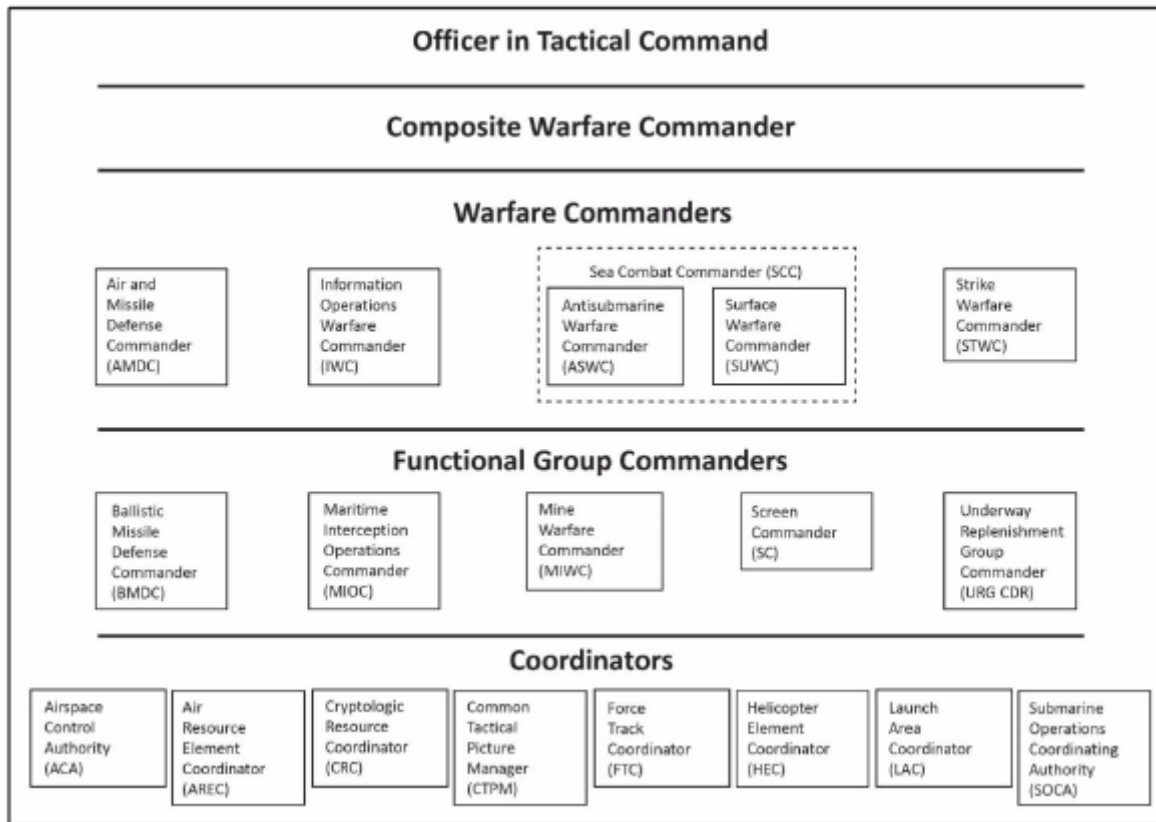


Figure 1

Mission Command: Approaches for command and control span a spectrum between “detailed” and “mission” theories. Detailed command and control tends to be centralized and formal. It relies on explicit plans and orders, requires strict obedience, and minimizes subordinate initiative and decision making. In this approach information is required to reach the top where sole decision-making authority resides, making it a slow process that does not react well to rapidly

²⁶ Ibid, 1-2.

changing conditions.²⁷ Conversely, mission command is decentralized. It delegates decision making to subordinate commanders guided by the higher commander's intent. It relies on implicit communication and allows subordinate commanders the freedom to act with initiative.²⁸ This approach promotes the ability to attack effectively first by shaping the C2 system to allow for rapid observation, orientation, decision, and actions (OODA).²⁹ In an age where technology allows for instant and constant information flow (in an uncontested space) it is natural for commanders to become attracted to a more detailed approach to command and control. In the future, as adversaries compete for control of the C2 space, and long-range precision guided munitions hold forces at risk at extended ranges, it is almost certain that information flow will be disrupted and combat forces will be dispersed. For those reasons joint maritime doctrine accepts mission command as the preferred method of command control, and recognizes the advantages accrued through its employment.

Mission command is essential to achieve unity of effort due to the dynamic nature of the CWC force structure. It allows integration of numerous and distinct warfighting capabilities that can enable defense against overlapping threats while potentially conducting simultaneous offensive operations.³⁰ Current Marine Corps doctrine is based on the tenants of maneuver warfare. *Marine Corps Operations (MCDP 1)*, states that maneuver warfare requires the employment of mission tactics. It goes on to define mission tactics as, “the assignment of a task to a subordinate without specifying how it must be accomplished, while the accompanying commander's intent provides the overall purpose...and by conveying the higher purpose seniors give their subordinates the authority—and responsibility—to adapt their methods for achieving

²⁷ U.S. Marine Corps. *Command and Control*. Marine Corps Doctrine Publication (MCDP) 6. (Washington, DC: Headquarters, United States Marine Corps, 2018), 86.

²⁸ *Ibid*, 87.

²⁹ JP 3-32, I-2.

³⁰ NWP, 3-56, 1-10.

the task as the situation unfolds”.³¹ Despite the slight differences in lexicon, Marine Corps doctrine and the Navy CWC are both guided by the philosophy of mission command. Although the C2 methodology is unique to the Navy, applications to integrate Marine capabilities into a similar structure can be realized with doctrinal changes aimed at re-organizing operational commands and integrating marine forces into the CWC construct.

Future Amphibious Command Arrangements

Navy and Marine Corps developing concepts outlined in *Littoral Operations in a Contested Environment* (LOCE) and *Expeditionary Advanced Base Operations* (EABO) recognize that the maritime domain faces a rapidly growing threat to sea control. Modern weapons and sensors extend ranges hundreds of miles both landward and seaward to the extent that the division between operations at sea and on land have become indistinct. Commanders at every level have access to the platforms and forces required to conduct operations from the sea and through the littorals. The transformation of the littorals into a singular, integrated battlespace dictates that sea denial operations and competition for sea lines of communication will require joint sensor, logistics, and fires support provided by both naval forces ashore and at sea.³² LOCE and EABO provide the operational context for naval forces to operate as a comprehensive sea and land-based force that can perform sea control and sea denial activities in contested area.³³ However, OPCON/TACON and supported/supporting relationships, in their current form, do not facilitate the rapid C2 requirements for such operations to succeed. Integration of those efforts

³¹ Headquarters, U.S. Marine Corps. *Marine Corps Operations*. MCDP 1-0. Washington, DC: Headquarters US Marine Corps, July 26, 2017, 1-3.

³² LOCE, 4.

³³ U.S. Marine Corps Concepts and Programs. “Expeditionary Advanced Base Operations.” Accessed March 21, 2019. <https://www.candp.marines.mil/Concepts/Subordinate-Operating-Concepts/Expeditionary-Advanced-Base-Operations>.

will require re-examination of the current naval command arrangements and tactical command and control structures. Effective C2 of forces must be organized and directed by principles that will facilitate integration and enable dynamic maneuver of the fleet. Integration needs to start at the highest levels.

Operational Command and Control: Command arrangements must allow for scalable, flexible, and agile command and control models that are not constrained by the current force structure.³⁴ The creation of a standing integrated Navy-Marine Corps Task Force that is OPCON to the fleet command would produce a unified command structure and give commanders the ability to task organize to the proper scale of operations; permit flexibility for rapid and responsive shifts in command relationships; facilitate centralized planning and decentralized execution, and drive cooperative technological innovation required to integrate a force that can persist in a distributed environment.

The Navy may argue that it already possesses the structure necessary to support proper task organization and promote flexible command relationships between Navy task force commanders and attached marine forces that make up the amphibious force. For example, U.S. Seventh Fleet is currently organized into specialized task forces allocated by warfare functions. With regard to amphibious operations, CTF 76 is comprised of all forward deployed amphibious shipping and associated capabilities of the Amphibious Task Force (ATF), while CTF 79 contains the FMF and functions as the Landing Force (LF) element. CTF 76 is led by a one-star admiral subordinate to Commander, Seventh Fleet, and responsible for the manning, training, and equipping of the amphibious task force. CTF 79 is typically led by a marine one-star general or colonel, depending on the size and composition of the landing force. It is established when marines are embarked as part of the amphibious force and the CATF/CLF command relationship

³⁴ Ibid, 6.

is formed. Until they embark, those marine forces are attached to a three-star command, III Marine Expeditionary Force (MEF); manned, trained, and equipped as a separate entity to perform traditional amphibious operations such as: raids, demonstrations, assaults, withdrawals, and crisis response.³⁵

The current command and control structure, doctrinally associated with naval task forces and amphibious forces, may potentially be valid for traditional amphibious operations, however, it does not allow the Navy and Marine Corps team to truly integrate. Instead, and by design, it creates a transition point for coequal commanders to reconfigure its task organization into separate forces to perform separate missions in separate battlespace within the maritime domain. This structure requires information management, force-flow requirements, and critical decision making to be coordinated across two (sometimes three) separate and unequal commands. Barriers created by the disjointed system can be overcome when C2 is designed to slowly and deliberately phase ashore to secure lodgments and establish land-control for follow-on forces, but it does not have the flexibility for distributed maritime operations.

Sea control operations enabled by LOCE and EABO are different. They will require a joint effort in which navy task force and marine landing force assets remain coupled. Instead of projecting power landward— forces ashore will be tasked with projecting power seaward to control enemy sea lines of communication and provide information, surveillance, reconnaissance, and targeting to enable dynamic maneuver to the fleet. In these operations C2 will not phase ashore, instead it will endure from sea-based platforms. Therefore, it must be designed under the control of a unified commander, either a Navy or Marine flag officer, and his/her single staff. The streamlined C2 will provide for synchronization of information, control

³⁵ JP 3-02, II-1.

of force design, and rapid decision making required to fight from the sea and through the littorals.

Creation of an integrated Navy-Marine Corps task force at the operational level will promote centralized planning and decentralized execution. Centralized planning at the fleet level enables the commander to synchronize, integrate, and distribute fleet capabilities to maximize effect and appropriately manage risk.³⁶ This planning function holds special significance for Navy-Marine integration as it is the first step to achieve cooperation between disparate warfare functions in the maritime domain, particularly in the littorals. *LOCE* acknowledges that although the marine operations center (MOC) provides a venue for operational planning within the fleet commands, there are insufficient personnel resident within those staffs to provide relevant expertise in Marine Corps capabilities, limitations, and support requirements for effective planning of naval integrated sea control operations.³⁷ Decentralized execution is only effective if it is guided by clear commander's intent and articulated by well-defined mission-type orders developed in the planning process. Deficiencies in planning inhibit the ability for Marine forces to integrate into the overall naval scheme of maneuver, restrains the means to practice mission command, and subverts the ability to create unity of effort.

The Commandant of the Marine Corps asserts that reinvigorating the FMF can be accomplished by simply assigning more marine experts in the fleet MOCs and shifting emphasis in training, education, and supporting establishment activities.³⁸ While this approach may attempt to fill the gaps in marine expertise at the operational commands, it does not address complications in the Navy-Marine component relationships framed by the Goldwater-Nichols

³⁶ Navy Warfare Development Center, "Primer on Naval Command and Control and the Composite Warfare Organization," rev. (working paper, Navy Warfare Development Center and U.S. Marine Corps Warfighting Laboratory Concepts Branch, 2019), 4.

³⁷ *LOCE*, 7.

³⁸ *CPG*, 2.

Act. The same barriers discussed previously with force flow and command relationships will continue to inhibit planning efforts between two separate command structures. A truly integrated Navy-Marine task force unified under a single commander and subordinate to the fleet commander will provide the joint expertise and develop the operational experience to enable centralized planning and decentralized execution required to operate in a distributed environment.

Integration of the operational forces and joint planning staffs will mature the Navy-Marine C2 architecture and pressurize the system to develop new concepts of operation. These concepts will drive interoperability efforts for existing navy and marine weapons, sensors and networks. It will also incentivize the acquisition community for the co-development of new capabilities, rather than the service-centric approach seen today. The Lightning Carrier concept, Naval Strike Missile, Maritime Strike Tomahawk, and unmanned surface and subsurface vessels all demonstrate cooperative innovation efforts that increase warfighting capability and conserve resources. These innovation efforts support the 2018 Commandant's Planning Guidance to seek greater integration between the Navy and Marine Corps in the Program Objective Memorandum (POM) development process while providing the joint force with substantial naval operational flexibility, lethality and survivability.³⁹

Establishment of standing integrated Navy-Marine Corps Task Forces OPCON to the fleet commanders, and coequal to the existing Navy task force organizations, will force Navy and Marine Corps integrate their efforts at the operational level. It will streamline C2 systems that will allow amphibious forces to persist in a contested environment. It will develop expertise, cultivate experience, and drive innovation and technological cooperation necessary to leverage sea and land -based capabilities and build a more lethal joint force.

³⁹ CPG, 2.

Tactical Command and Control: The Navy and Marine Corps will continue to refine its organization to man, train, and equip an integrated force that will provide fleet commanders with the ability to operate in the littorals. These refinements will create modular, scalable, and cohesive naval networks of sea-based and land-based sensors, shooters, and sustainers that will deliver the capabilities and capacities necessary to persist forward in the contested battlespace.⁴⁰ The composite warfare command construct provides the most efficient way to integrate those capabilities. The philosophy of mission command inherent in CWC is consistent with the Marine's maneuver warfare concept of mission tactics, thus providing the opportunity to employ FMF as warfare commanders and function coordinators within the system.

Joint Concept for Access and Maneuver in the Global Commons (JAM-GC) is the framework for joint access in denied area. It articulates a dual-postured force consisting of inside forces and *outside* forces. The former persists forward as a widely distributed force inside the adversary weapons engagement zone (WEZ), while the latter force remains outside the WEZ in order to maintain maneuverability to provide mass fires support capability and logistics sustainment.⁴¹ EABO fits into the dual-postured context of the JAM-GC as the inside force, making it an enabling capability for LOCE and DMO. Expeditionary Advanced Basing (EAB) provides the infrastructure intended to organize the *inside* force. They are “designed to host, secure, sustain, and maintain warriors and their weapons systems on a more amorphous and difficult to target forward-based infrastructure.”⁴² The *Marine Corps Force Design 2030* has directed the creation of a Marine Landing Regiment (MLR) as the initial formation to test and

⁴⁰ LOCE, 9.

⁴¹ U.S. Marine Corps Warfighting Laboratory, *Expeditionary Advanced Base Operations (EABO) Handbook: Considerations for Force Development and Employment* (Quantico, VA: Marine Corps Combat Development Center, 5.

⁴² *Ibid*, 25-26.

validate the EABO concept.⁴³ It is also experimenting with MEU forces to support EABO. The *outside* force remains the legacy fleet capabilities characteristic of the CSG and ARG compositions.

The crux of the matter for tactical control of distributed forces in the littorals is the ability to connect the *inside* force and the *outside* force through a common C2 construct in order to produce effects from Navy-Marine complementary capabilities. LOCE proposes a solution to this problem by creating a Littoral Combat Group (LCG) led by a Navy flag officer. It would include an ARG, a MEU, one or more surface combatants, and capabilities from the NEF.⁴⁴ This force package is not an original design. The Navy and Marine Corps began experimenting with this blended C2 structure in 2003 within the Expeditionary Strike Group (ESG) concept to project power through the littorals.⁴⁵ The ESG concept failed because it continued to employ traditional C2 models—the FMF operated outside the CWC construct as marine forces remained under control of the CLF, precluding the ESG from leveraging its full capabilities.

In order for the LCG concept to work, the competing parallel C2 structures rooted in legacy models will require modification. CATF/CLF at the tactical level may still be relevant for episodic amphibious operations such as: raids, non-combatant evacuations (NEO), and humanitarian assistance and disaster relief (HA/DR); but the persistent missions of LOCE and EABO will require a unified naval commander with the ability to control multi-mission platforms and distributed forces to support simultaneous operations in several mission areas. The CWC provides a framework that can enable integrated offensive and defensive combat

⁴³ Headquarters US Marine Corps, *Force Design 2030* (Washington, DC: Headquarters US Marine Corps, March 2020), 10.

⁴⁴ LOCE, 12.

⁴⁵ Expeditionary Strike Group, GlobalSecurity.org. Accessed 13 January 2020. <https://www.globalsecurity.org/military/agency/navy/esg.htm>.

operations at sea and on shore against multiple targets and threats.⁴⁶ Within this framework Marines should expect to assume duties and responsibilities of warfare commanders within the CWC.

The Marine Corps Warfighting Laboratory conducted the *Ghost Fleet* wargame in January 2020 which demonstrated how Navy and Marine Corps integration could occur in the specific mission of sea denial.⁴⁷ Sea denial missions: secure key maritime terrain; enable operational access; and divert, delay, disrupt, or destroy enemy forces were tested and observed to be viable for the MLR or MEU under the EABO concept. However, vulnerabilities in fires capacity and coordination were exposed during the wargames that indicated the need for the creation of an LCG and integration into the CWC construct.

LOCE cites capacity challenges as a key contributor to the military problem for distributed maritime operations. It recognizes that within regions of the littorals naval forces operating distributed might not have sufficient capability to hold key maritime terrain that is held at risk by adversary long-range weapons. In those instances, forces may need to composite with additional assets in order to provided sufficient air and missile defense or long-range strike capability.⁴⁸

Ghost Fleet hypothesized an approach to EABO in which an MLR consisting of a headquarters element, logistics group, and fires EABs were distributed across key maritime terrain in the deep area of operations to conduct sea denial. The game provided multiple opportunities to engage an adversary SAG at ranges that would allow high-value units to operate freely within an AOA. However, the wargame demonstrated that anti-ship cruise missile capacity

⁴⁶ LOCE, 10.

⁴⁷ The Ghost Fleet wargame also exposed potential capabilities of the MLR/MEU in other naval essential functions: All Domain Access, Deterrence, and Maritime Security, but those will not be addresses in this paper.

⁴⁸ LOCE, 8.

for fires EABs were not sufficient to provide effects that would, destroy, disrupt or delay a group consisting of more than a single ship. Successful engagements were consummated only when multiple EABs coordinated strike operations with airborne fighter attack assets or cruise missile assets from Navy surface combatants. The existing C2 structure required coordination for offensive strikes to flow from the MLR up to the MEF, laterally to the fleet commander or JFMCC, and then back down to the strike warfare commander (STWC) or surface combatant commander (SCC) in the Navy's CWC in order to effect joint fires. Lack of unity of command between the *inside* force and *outside* force created artificial time constraints that prevented the rapid aggregation of composite forces with the ability to strike effectively first.

A potential solution to the capacity and coordination problem in EABO offensive operations would be to task organize the *inside* and *outside* force as an LCG integrating fleet forces at sea with marine forces ashore into the CWC construct. The MLR commander could function as the STWC or SCC for the amphibious force with the authority to control not only EAB offensive fires from the MLR, but also aviation assets from the CSG or ARG/MEU, and the cruise missile capability from supporting surface combatants. *Ghost Fleet* did not specifically test the MLR/STWC theory, but it did test an analogous C2 structure which proved this solution is viable. In it, the ARG/ MEU air combat element commander acted as the STWC for the LCG, while a Navy Afloat Planning System detachment embarked in the LHD assumed Launch Area Coordinator responsibilities for the AOA. Guided by commander's intent from the OTC, the STWC coordinated strike operations utilizing F-35B aircraft, organic EAB fires capability, and friendly SAG assets. The streamlined C2 architecture enable rapid decision-making and prompt action from composite forces and provided joint effects against the adversary that met the sea denial missions.

The previous example is just a single application for FMF to integrate into the CWC. There are potential applications for marine forces to assume positions as warfare commanders, functional group commanders, resource coordinators, and participating units within a CWC architecture. Future wargames, exercises, and experimentation should inject marine forces into these roles to determine the most effective ways to integrate capabilities that will facilitate simultaneous offensive and defensive combat operations against multiple threats in each of the warfare domains. Results will inform DOTMLPF (Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities) changes required to develop common tactics, techniques, and procedures needed to effectively aggregate the fleet and select fleet Marine force units.

Conclusion

The littoral operating environment is becoming increasingly contested. Rapid advancements in adversary sensor, network, and weapons technology have enhanced its ability to find, fix, target, and track; accelerated decision-making times; and extended weapons engagement zone ranges. The *38th Commandant's Planning Guidance* acknowledges that after almost twenty years of fighting regional land battles as the nation's second army, the Marine Corps is not postured to meet the demands of the future operating environment.⁴⁹ In *A Design for Maintaining Maritime Superiority 2.0* the Chief of Naval Operations accepts that it has been decades since the Navy has competed for sea control.⁵⁰ Guidance from both maritime services agree that Naval integration is the imperative for designing a force that aligns with NDS efforts

⁴⁹ Headquarters US Marine Corps, *Commandant's Planning Guidance* (Washington, DC, 2019), https://www.hqmc.marines.mil/Portals/142/Docs/%2038th%20Commandant%27s%20Planning%20Guidance_2019.pdf?ver=2019-07-16-200152-700.

⁵⁰ Office of the Chief of Naval Operations, *A Design for Maintaining Maritime Superiority ver 2.0* (Washington, DC: Chief of Naval Operations, December 2018), 10.

to build a more lethal Joint Force with the ability to deter war through a “decisive and sustained military advantage.”⁵¹

The Navy and Marine Corps possess effective and complementary capabilities defined by the character of maritime warfare. Integration of those capabilities is the critical component to building a more lethal force, however, in the past they have been employed in and artificially divided battlespace.⁵² As a result, command and control aspects of naval operational art and tactical doctrine have not been adequately developed for an integrated fight from the sea and through the littorals. Creation of U.S. Marine Corps standing task forces under control of the fleet commander, and coequal to Navy task force organizations, will produce unity of command, support task-organization to proper scale of operations, and permit flexibility for rapid and responsive shifts in command relationships at the operational level. Integration of Fleet Marine Forces into the Navy’s composite warfare command construct will tactically connect a dual-postured force that will become the enabling capability for LOCE and EABO. Such initiatives will help build an effective operational command organization and common tactical command and control (C2) architecture that will enable the integration of Navy and Marine Corps’ land and sea-based capabilities required for a persistent naval forward presence able to compete in the maritime domain.

⁵¹ 2018 Summary of the National Defense Strategy, 4.

⁵² LOCE, 7.

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