REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE *(DD-MM-YYYY)*	2. REPORT TYPE	3. DATES COVERED *(From - To)*
04/25/2019	Master's of Military Studies	SEP 2018 - APR 2019

4. TITLE AND SUBTITLE
DOCTRINAL SHORTFALLS IN NAVY MISSION COMMAND

5a. CONTRACT NUMBER
N/A

5b. GRANT NUMBER
N/A

5c. PROGRAM ELEMENT NUMBER
N/A

6. AUTHOR(S)
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5d. PROJECT NUMBER
N/A

5e. TASK NUMBER
N/A

5f. WORK UNIT NUMBER
N/A

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
USMC Command and Staff College
Marine Corps University
2076 South Street
Quantico, VA 22134-5068

8. PERFORMING ORGANIZATION REPORT NUMBER
N/A

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSOR/MONITOR'S ACRONYM(S)
Dr. Jonathan Phillips

11. SPONSOR/MONITOR'S REPORT NUMBER(S)
N/A

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release, distribution unlimited.

13. SUPPLEMENTARY NOTES

14. ABSTRACT
Future naval operating concepts anticipate a distributed force to fight under communications denied and degraded environments. Mission command will be critical to success as centralized C2 methods are denied. However, the Navy cannot effectively conduct mission command because it lacks the prerequisite doctrinal vocabulary of tactical mission tasks to issue concise mission-type orders and commander's intent. The results are lengthened orders with imprecise language, reduced coordination in Joint operations, truncated tactical menu, and obstructed subordinate initiative.

15. SUBJECT TERMS
Mission command; Mission-type orders; Tactical mission tasks; Command by negation; Navy

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			USMC Command and Staff College
					19b. TELEPHONE NUMBER *(Include area code)*
Unclass	Unclass	Unclass	UU	42	(703) 784-3330 (Admin Office)

United States Marine Corps
Command and Staff College
Marine Corps University
2076 South Street
Marine Corps Combat Development Command
Quantico, Virginia 22134-5068

MASTER OF MILITARY STUDIES

DOCTRINAL SHORTFALLS IN NAVY MISSION COMMAND

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

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Preface

The latest *U.S. Navy Key Strategic Issues List* asks, "What DOTMLPF [Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities] changes would increase the Navy's ability to operate and prevail in a high-threat environment?"[1] This paper identifies Navy doctrinal shortfalls in support of mission command – the conduct of military operations through decentralized execution based upon mission-type orders. This paper does not address the cultural and leadership characteristics which will continue to hinder mission command in the Navy, despite any recommendations to doctrine.

I would like to acknowledge all the guidance, insight, criticism, and support I received in researching and revising this thesis. Your feedback was invaluable in straightening my logic, questioning my assumptions, and strengthening my argument:

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[1] Naval War College, *U.S. Navy Key Strategic Issues List Academic Year 2016-2017*, October 31, 2016.

Executive Summary

Title: Doctrinal Shortfalls in Navy Mission Command

Author: Lieutenant Commander Josh Virgadamo, United States Navy

Thesis: The Navy cannot effectively conduct mission command because it lacks the prerequisite doctrinal vocabulary of tactical mission tasks to issue concise mission-type orders and commander's intent. The results are lengthened orders with imprecise language, reduced coordination in Joint operations, truncated tactical menu, and obstructed subordinate initiative.

Discussion: Much is written on the Prussian philosophy of mission command (*Auftragstaktik*) and how to foster it, (e.g., trust, initiative). This paper identifies an actionable shortfall in doctrine – a lack of tactical mission tasks as the common language to enable mission-type orders necessary to mission command. The Chairman of the Joint Chiefs of Staff's 2012 *Mission Command* white paper cites mission command as critical to success in increasingly complex and uncertain environments. However, the argument of "best" C2 architecture is irrelevant as more centralized C2 architectures may not be available in future conflicts. Important Navy, Marine Corps, and Joint operating concepts predict a distributed fight under denied or degraded communications. The likely preclusion of centralized C2 makes mission command the de facto model and as such still needs a language to execute.

Mission command and mission-type orders are not new. The Composite Warfare Commander (CWC) doctrine executes "command by negation". However, command by negation, and the CWC construct writ large, is not synonymous with mission command and cedes time and battlespace to the enemy. Warfare commanders are charged to 'destroy', 'nullify', or 'reduce' hostile air and ballistic missile threats, 'neutralize' enemy targets ashore, and 'seize' enemy bases. Yet these terms are not doctrinal. Capstone warfare doctrine like NWP 3-20, *Naval Surface Warfare Manual,* also fails to root tactical tasks in doctrinal definitions. Historical review of Navy doctrine provides context in which the Navy learned to perform mission command as a function of sea control, which waned once the Cold War, and the Navy's challenge to sea control, ended.

The lack of tactical mission tasks impacts the Navy in four ways: lengthy orders with imprecise language and ambiguous direction, reduced coordination in Joint operations, limited tactical menu available to commanders, and hindered subordinate initiative. The Navy's return to sea control as a primary mission requires disciplined and effective communications in denied and degraded environments. A doctrinal vocabulary of tactical mission tasks enables commanders to issue concise mission-type orders which convey their intent and supply subordinate initiative.

Conclusion: A doctrinal vocabulary of tactical mission tasks enables commanders to issue concise mission-type orders which convey their intent. The doctrine should align tasks to Joint terms where possible, be scalable by operational unit and coordinate task execution at echelon, and align along friendly-, enemy-, and terrain-oriented operations. Finally, leaders must be taught how to receive and give mission-type orders.

Glossary

A2/AD	Anti-Access/Area Denial
ADP	Army Doctrine Publication
AMDC	Air and Missile Defense Commander
AOMSW	Air Operations in Maritime Surface Warfare
ASUW	Anti-Surface Warfare
ASW	Antisubmarine Warfare
C2	Command and Control
C2D2E	Command and Control in a Denied or Degraded Environment
CIC	Combat Information Center
CNO	Chief of Naval Operations
COMPTUEX	Composite Unit Training Exercise
CONOP	Concept of Operation
CSG	Carrier Strike Group
CWC	Composite Warfare Commander
DMO	Distributed Maritime Operations
DTIC	Defense Technical Information Center
EABO	Expeditionary Advance Base Operations
EMCON	Emission Control
ESG	Expeditionary Strike Group
EXWC	Expeditionary Warfare Commander
F2T2EA	Find, Fix, Track, Target, Engage, Assess
FM	Field Manual

JAM-GC	Joint Concept for Access and Maneuver in the Global Commons
JFMCC	Joint Force Maritime Component Commander
LOCE	Littoral Operations in a Contested Environment
MAGTF	Marine Air-Ground Task Force
MCDP	Marine Corps Doctrine Publication
NDP	Naval Doctrine Publication
NMETL	Naval Mission Essential Task List
NTA	Naval Task
NTTP	Naval Tactics, Techniques, and Procedures
NTRP	Navy Tactical Reference Publication
NWP	Naval Warfare Publication
OPLAN	Operation Plan
OPORD	Operation Order
OTC	Officer in Tactical Command
SAG	Surface Action Group
SAU	Search and Attack Unit
SLOC	Sea Line of Communication
SSK	Diesel Hunter-Killer Submarine
STWC	Strike Warfare Commander
TACON	Tactical Control
TM	Tactical Memorandum
TORIS	Training and Operational Readiness Information Services
UNTL	Universal Navy Task List

Introduction

The Prussian philosophy of mission command, or *Auftragstaktik,* began with Scharnhorst's reforms and crystallized with Moltke the Elder's victory in the Franco-Prussian War. This success popularized the philosophy in Western militaries.[1] Joint maritime doctrine succinctly defines mission command as "the conduct of military operations through decentralized execution based upon mission-type orders."[2] Ideas of mission command found audience in the U.S. at various times: the Naval War College in the interwar period, in post-Vietnam Army reforms of the 1970s and 80s, and recently in then-Chairman of the Joint Chiefs of Staff General Martin Dempsey's 2012 *Mission Command* white paper.[3] General Dempsey included a third principle absent in the Joint definition – commander's intent. Writing to inform development of Joint Force 2020, he asserted mission command as critical to success in increasingly complex and uncertain environments.[4] The Navy's capstone document for tactical force organization, Naval Warfare Publication (NWP) 3-56, *Composite Warfare: Maritime Operations at the Tactical Level of War,* recognizes the necessity of mission command and mission-type orders consistent with commander's intent to enable aggressive, independent action in mission accomplishment.[5]

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[1] Eitan Shamir, *Transforming Command: The Pursuit of Mission Command in the U.S., British, and Israeli Armies*, (Stanford, CA: Stanford University Press, 2011), 29.

[2] Joint Chiefs of Staff, *Command and Control of Joint Maritime Operations,* JP 3-32 (Washington, DC: Joint Chiefs of Staff, June 8, 2018), ix.

JP 3-0, *Joint Operations* (2017) definition is slightly different: "If a commander loses reliable communications, mission command—a key component of the C2 [joint] function—enables military operations through decentralized execution based on mission-type orders." This definition seems to relegate mission command to a second-tier or back-up form of C2 with the caveat of lost communications. The debate of definitional continuity between Joint publications is beyond the scope of this paper. The maritime definition is congruent with the paper's theme.

[3] Trent Hone, *Learning War: The Evolution of Fighting Doctrine in the U.S. Navy, 1898-1945,* (Annapolis, MD: Naval Institute Press, 2018), 156.

Shamir, 101.

[4] GEN Martin E. Dempsey, Chairman of the Joint Chiefs of Staff, *Mission Command,* White Paper, April 3, 2012, 3.

[5] Chief of Naval Operations, *Composite Warfare: Maritime Operations at the Tactical Level of War*, NWP 3-56 (Washington, DC: Chief of Naval Operations, December 2015), 1-11.

Naval Doctrine Publication (NDP) 1, *Naval Warfare*, defines a mission as:

1. The task, together with the purpose, that clearly indicates the action to be taken and the reason therefore.

2. In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task.[6]

Herein lies the crux of the problem – Navy doctrine does not adequately address tactical and operational tasks. Within Composite Warfare Commander (CWC) doctrine, the Air and Missile Defense Commander (AMDC) directs "actions taken to destroy, nullify, or reduce the effectiveness of hostile air and ballistic missile threats", the Strike Warfare Commander (STWC) directs "operations to destroy or neutralize enemy targets ashore", and campaign and contingency plan tasks may "destroy hostile forces, such as seizure or neutralization of enemy bases."[7] Yet, to state "or" between these tasks implies a distinction commanders should understand since 'destroy', 'nullify', 'reduce', 'neutralize', and 'seize' are not terms codified in naval doctrine publications as they are in the Army and Marine Corps.[8]

In developing *Auftragstaktik*, Moltke stated, "commanders of units to be committed must receive definite tasks (*auftrage)*, but not be limited in the choice of means to accomplish them."[9] Tasks are distinguishable by their end state and constraints to achieve it. In 2018 Admiral Swift, Commander, Pacific Fleet, wrote, "We speak glibly about mission command. Our core doctrinal publications assert that mission command is the default style of operations within the U.S. Navy.

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[6] Chief of Naval Operations, *Naval Warfare*, NDP 1 (Washington, DC: Chief of Naval Operations, March 1, 2010), 65.
[7] NWP 3-56, 3-1.
Ibid, 3-4.
Ibid, 1-4.
[8] Headquarters, Department of the Army, *Tactics*, FM 3-90 (Washington, DC: Headquarters, Department of the Army, July 2001) B-1.
[9] Shamir, 40.

Most serving officers with more than a year of fleet experience will understand that it is not."[10] The Navy cannot effectively conduct mission command because it lacks the prerequisite doctrinal vocabulary of tactical mission tasks to issue concise mission-type orders and commander's intent. The results are lengthened orders with imprecise language, reduced coordination in joint operations, truncated tactical menu, and obstructed subordinate initiative. By learning through challenges up to and through 1942, the Navy developed the ability to conduct mission command and maintained that ability through most of the Cold War. The fall of the U.S.S.R as a peer-threat resulted in the decline of sea control as one of the Navy's primary missions. The other missions, power projection and strategic deterrence, did not require the Navy to communicate well and mission command atrophied. The Navy could regain the ability to apply mission command if it adapted its language to ensure clarity of the commander's desired end state. As a senior Navy officer stated, operation order (OPORD) language needs to leave room for initiative, but no room for doubt in the mind of the subordinate commander.[11]

Mission Command and the Future Fight

Proponents of mission command argue that it should be the preferred command and control (C2) methodology in the next war because it performs better in difficult situations. Experimental evidence, however, provides only limited support for the claim. In simulation experiments by the Swedish National Defence College, three C2 architectures – directive command, command by negation, and the control condition – were tested with the task to extinguish simulated fires in a microworld. Span of control (number of subordinate units) and tempo (time pressure) were independent variables. Task efficacy (training) was not analyzed,

[10] ADM Scott Swift, "A Fleet Must Be Able to Fight," United States Naval Institute, *Proceedings* 144, no. 5 (May 2018): 1383.
[11] Senior Navy officer, email message to author, March 14, 2019.

but firefighting units were proficient. The experiment supports the hypothesis that increasing complexity affects directive command more so than command by negation, however, all performed equally poorly under condition of many subordinate units and heavy time pressure.[12] That is, there comes a point where mission command is no more effective than centralized C2 when a commander has wide span of control with fast tempo.

A more convincing argument for adopting mission command is that more centralized C2 architectures may not be available in future conflicts. While command by negation demonstrated overall statistically significant better performance than directive command and the control condition, the argument of "best" C2 architecture is irrelevant.[13] The relevant question is which C2 architecture will be available in the future fight. Important Navy and Marine Corps concepts predict a distributed fight under denied or degraded communications that will preclude the use of centralized C2 architectures.[14] The likely preclusion of centralized C2 makes mission command the de facto model and as such still needs a language to execute. It is worth investing in doctrinal changes which support distributed decision making by enhanced and collective understanding of the mission and commander's intent through tactical mission tasks.

The Navy exercises "command by negation" where a subordinate exercises initiative under commander's intent unless higher authority negates their actions.[15] General Dempsey's

[12]Mats Persson and Georgios Rigas, "Complexity: the dark side of network-centric warfare," *Cognition, Technology & Work* 16, no. 1 (February 2014): 103.
[13] Ibid, 112.
[14] 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.
Department of the Navy, *Littoral Operations in a Contested Environment*, (Washington, DC: Department of the Navy, 2017), 5.
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/
[15] NWP 3-56, 1-11.

white paper recognizes the Services' different preferences in titling mission command.[16] Far from an iconoclast's argument over semantics, command by negation is not command by intention and the CWC construct writ large is not synonymous with mission-type orders. Subordinates are not required to seek approval before acting defensively but defense is not initiative. The problem with command by negation is it assumes the commander can a) know/observe subordinate actions, and b) communicate their negation. This conversation cedes time and battlespace to the enemy contrary to the vision of the next war and proposed future operating concepts of Distributed Maritime Operations (DMO), Littoral Operations in a Contested Environment (LOCE), and Joint Concept for Access and Maneuver in the Global Commons (JAM-GC).[17] On paper, CWC is flexible enough to function without comms assuming clear intent is provided. In practice, the uncomfortable absence of doctrinal tasks reinforces the reliance on the extensive communications network which supports CWC.

NWP 3-56 recognizes the necessity to operate in emissions control (EMCON) or in comms denied environments when comms to higher is infeasible, but this veiled centralized control imposes distance along vulnerable communications networks between the problem and the decision maker and increases the time to close the kill chain.[18] "Decisions relayed up the chain," General Dempsey admonishes, "surrender initiative to the enemy."[19] Further, it does not support distributed units under tactical control (TACON) to the officer-in-tactical command (OTC) and not a CWC. Ultimately, the CWC is a 1970s Cold War era construct for Carrier or

[16] Dempsey, 3.
[17] A Design for Maintaining Maritime Superiority ver 2.0, 10.
LOCE, 15.
Michael E. Hutchens et al., "Joint Concept for Access and Maneuver in the Global Commons: A New Joint Operational Concept," *Joint Force Quarterly* no. 84 (Jan 1, 2017): 134.
[18] Drew A. Schuab, "Mission Command and the United States Navy: Overcoming Doctrinal Hurdles to Enable Mission Command," (Master's thesis, Newport, RI: Naval War College, 2017), 16.
[19] Dempsey, 4.

Expeditionary Strike Group (CSG/ESG) defense and does not support multi-carrier battle force or non-carrier centric force organization.[20]

The U.S. Marine Corps and Army and both advocate mission command and mission-type orders. Marine Corps Doctrine Publication (MCDP) 6, *Command and Control*; *Marine Corps Operating Concepts, third ed*.; Army Doctrine Publication (ADP) 6-0, *Mission Command*; and Field Manual (FM) 3-0, *Operations,* all dedicate chapters to the topic. Not-coincidentally, General Dempsey was Training and Doctrine Command (TRADOC) commander during the ADP 6-0 and FM 3-0 revisions when 'mission command' replaced 'command and control' as a warfighting function. The Army even established a Mission Command Center of Excellence at Fort Leavenworth, Kansas. In ADP 6-0, the importance of tactical mission tasks to mission-type orders is clear. To "achieve… results without further orders" with a "clear image of… key tasks, and the desired outcome" requires doctrinally defined language.[21] Achieving commander's intent from an order to 'defeat' instead of 'destroy' has consequences when such terms are not grounded in doctrine. 'Defeat' requires the loss of an enemy's physical means or will to fight.[22] This may force the commander into an otherwise inauspicious battle of attrition. The Army's FM 3-90, *Tactics*, and Marines' MCDP 1-0, *Marine Corps Operations*, make this distinction.

Joint maritime doctrine promotes mission command to enable unity of effort in decentralized operations.[23] Collaborative planning and central guidance (unity of command) are necessary but insufficient to achieve unity of effort. Unity of effort also requires mutual understanding among the participating forces. Mission-type orders that accurately convey

[20] NWP 3-56, 22.
Patrick Molenda,"Silence on the Net," *United States Naval Institute Proceedings* 141, no. 5 (May 1, 2015): 34.
[21] Headquarters, Department of the Army, *Mission Command,* ADP 6-0 (Washington, DC: Headquarters, Department of the Army, March 2014), 4.
[22] FM 3-90,
[23] JP 3-32, ix.

commander's intent by clearly delineating the task and purpose using specific language can provide that mutual understanding. Here, the tired aphorism "words have meaning" proves the point. Correct articulation of risk tolerance and desired end state enable the on-scene commander to meet commander's intent.[24]

During World War II the Navy confronted the challenge of combining ad hoc forces with disparate languages and doctrines as task groups. At Guadalcanal, ships "lacked a clear and uniform vocabulary for communicating in battle" with "[d]ifferent meanings for the same signal [which] undermined the ability of ships to coordinate their actions."[25] The advent of shipboard combat information centers (CIC) to manage tactical information and direct the fight developed new vocabulary to more effectively communicate between ships and "abbreviate the flow of information and orders."[26]

The tactical task is especially important when battlefield conditions change while the end state remains constant.[27] Naval forces are fluid; strike groups deployed from continental U.S. bases may exercise TACON over forward-deployed units of SIXTH or SEVENTH Fleet. NWP 3-56 agrees that Navy force structure is dynamic, stating mission command is necessary to unity of effort due to a "longstanding practice" of issuing mission-type orders to gain relative advantage over an enemy's decision-making cycle.[28] Tactical tasks cannot be Strike Group esoteric and must provide enough understanding for the subordinate to adapt to new conditions without laboring over interpretation or executing tangentially to commander's intent.

[24] JP 3-32, III-8.
[25] Hone, 207.
[26] Ibid, 231.
[27] Chief of Naval Operations, *Naval Warfare*, NDP 1 (Washington, DC: Chief of Naval Operations, March 28, 1994), 40.
[28] NWP 3-56, 1-10.

In 2015, the Navy's Surface Warfare leadership triumvirate – Commander, Naval Surface Forces; Commander, Naval Surface Forces Atlantic; and Director, Surface Warfare (OPNAV N96) – outlined the distributed lethality operations concept. The concept summoned a paradigm shift from defense to offensive, dispersed surface formations of hunter-killer surface action groups (SAG) to combat any anti-access/area denial (A2/AD) environment.[29] The 2016 Surface Force Strategy, *Return to Sea Control*, confirms distributed lethality as an "effective response to the tactical, operational, and strategic challenges posed in denied or contested environments."[30] C2 is enumerated as a distributed lethality enabler under the auspices of conducting dispersed operations away from centralized networks.[31] The concept asserts the Navy "will have to become more comfortable with autonomous operations across vast distances" and that "no leaps of technology [are] required… [to] think differently about how we equip and employ [surface ships]."[32]

Historic Case Studies: Operational Parallels to the Future War Environment

To consider doctrinal changes to command and control, it is appropriate to review historical events and their concomitant environments which could mirror future war projections. Mission command and mission-type orders are not new. Royal Navy Vice Admiral Horatio Nelson is the archetype for mission command and his victory at Trafalgar is so ubiquitously cited it is almost cliché. Yet at least one analysis contextualizes Nelson in the broader Royal Navy culture. By the Battle of Trafalgar, the British Empire had waged 50-75 years of continuous naval warfare. Instead of theoretical discourse, British officers experienced combat and

[29] VADM Thomas Rowden, RADM Peter Gumataotao, and RADM Peter Fanta, "Distributed Lethality," United States Naval Institute *Proceedings* 141, no. 1 (January 2015): 18.
[30] Commander, Naval Surface Force, *Surface Force Strategy – Return to Sea Control*, (San Diego, CA, 2016), 17.
[31] Rowden et al., 22.
[32] Ibid., 23.

eschewed the doctrine of strict control in favor of informed initiative and mutual support with little to no signaling.[33] It could be argued that command and control in the age of sail demanded some form of mission command by all navies, yet this lack of signaling in British success reflects a clear understanding of commander's intent. Nelson was the greatest amongst greats, but any number of captains and junior flag officers would have proved equal to the task.[34] Of his defeat, French Admiral Villeneuve said, "To any other nation the loss of Nelson would have been irreparable; but in the British Fleet off Cadiz, every captain was a Nelson."[35]

One hundred years later, U.S. naval officer and historian Lieutenant Commander Dudley Knox wrote on mission command, informed initiative, and the import of unifying doctrine. He stated in his 1914 essay, *Old Principles and Modern Applications*:

> No other method can be sound than that of such co-ordination as may be obtained through indoctrination preceding the action, coupled with a uniform system of command by means of which it will be well understood just what the function of each commander is to be in any undertaking that may arise.[36]

In a second essay, *Trained Initiative and of Action,* Knox opined "[c]o-ordinated effort requires fundamentally; first, a division of the work into tasks, each suited to the office, the capability and the capacity of the individual to whom it is assigned"[37] His essays were more than musings; they reflected his experiences and observations and represented a growing cadre of professional

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[33] Andrew Gordon, "Military transformation in long periods of peace: the Victorian Royal Navy," In *The Past as Prologue: The Importance of History to the Military Profession,* ed. Williamson Murray and Richard Hart Sinnreich, (New York: Cambridge University Press, 2006), 151.
[34] Ibid, 152.
CF: Andrew Gordon, *The Rules of the Game: Jutland and British Naval Command*, (Annapolis, MD: Naval Institute Press, 1996).
[35] Ibid, 152.
[36] LCDR Dudley W. Knox, "Old Principles and Modern Applications," United States Naval Institute, *Proceedings* 40, no. 152 (July-August 1914): 1029.
[37] LCDR Dudley W. Knox, "Trained Initiative and of Action: The True Bases of Military Efficiency," United States Naval Institute, *Proceedings* 39, no. 145 (1913): 55.

officers. In the years before World War I the U.S. Navy discovered shortcomings in its doctrine which prevented understanding of the mission, and so experimented with issuing mission-type orders and developed language to unify effort. In 1910 the Navy introduced the "estimate of the situation" as its problem-solving approach: commander's considered the mission, assessed the enemy forces, evaluated their own forces, then decided.[38] Early application delivered "marked diversity in the statements of the mission" and the need to baseline strategic and tactical ideas amongst the officers.[39] Rear Admiral Fletcher, Commander-in-Chief Atlantic Fleet, released his *Battle Instructions* in 1916 with the intent to issue battle plans as mission-type orders. He intended to give context for coordinated action and "sufficient background to understand his intent and act in accordance with it" without specifying individual action.[40]

When the U.S. entered World War I in April 1917, Admiral William Sims became commander of American Naval Forces in Europe. Prior to this command, Sims was a student at the Naval War College (along with Knox) and Commander, Atlantic Fleet Torpedo Flotilla (with Knox as his aide). The Flotilla was a test bed for ship commanders to develop and agree on doctrine. Because the commanders understood the doctrine and underlying assumptions of their orders, this reduced the necessity for signaling and increased initiative.[41] Sims extended his same approach to command during World War I, communicating a concept of a mission and the general plan. Knox wrote, "initiative and decision of the highest order will be almost continuously demanded of commanders… [and] Neither signals, radio-messages, nor

[38] Hone, 104.
[39] Ibid, 105.
[40] Ibid, 112.
[41] Ibid, 115.

instructions, written or verbal, can suffice, either singly or in combination, to produce the unity of effort… demanded by modern conditions in a large fleet."[42]

In the interwar period, professional writing and doctrine continued to advance the language and grammar of mission command, including a Naval War College report of British Admiral Jellicoe's centralized command at Jutland in 1916, U.S. Battle Fleet commander Admiral Louis de Steiguer's 1927 *Battle Fleet Fighting Instructions*, and the U.S. Navy's 1934 *War Instructions.*[43] These products emphasized decentralized decision making and orders written on "what" to do rather than "how". In January 1941, Admiral Ernest King, Commander-in-Chief Atlantic Fleet, wrote Serial 053, *Exercise of Command–Excess of Detail in Orders and Instructions*. He expressed his concern for the "standard practice" of senior officers to issue orders which told subordinates "how" as well as "what" to do.[44] He deemed such orders antithetical to subordinate initiative. But in telling subordinates "what" to do, the task must be uniform across the fleet and rooted in doctrine.

After the U.S. entered World War II and the war progressed, the Navy understood that C2 of dispersed forces could be exerted only by precursor plans and orders or by radio. EMCON operations often negated the latter.[45] *Current Tactical Orders and Doctrine, US Pacific Fleet* of June 1943, or PAC-10, standardized tactics and issued a new vocabulary to enable ships and squadrons to retain coordination and cohesion as they moved around the fleet.[46] Admiral Nimitz's Operation Plan (OPLAN) 8-44 issued for Leyte Gulf and the liberation of the

[42] Knox (1913), 42.
[43] Hone, 140.
Ibid, 145.
Ibid, 158.
[44] Thomas B. Buell, *Master of Sea Power: A Biography of Fleet Admiral Ernest J. King*, (Boston: Little, Brown & Co., 1980), 521.
[45] Robert C. Rubel, "Mission Command in a Future Naval Combat Environment," Naval War College Review 71, no. 2 (March 22, 2018): 114.
[46] Hone, 257.

Philippines became a textbook example of mission-type orders, to wit: "In case of opportunity for destruction of major portions of the enemy fleet is offered or can be created, such destruction becomes the primary task."[47] Yet this lauded example of mission-type orders is a poor example of mission command. Admiral Halsey, Commander, THIRD Fleet, failed to understand his mission task in context of commander's intent. Admiral Kinkaid, Commander, SEVENTH Fleet and Halsey's coordinate commander in echelon, understood in his OPLAN 13-44 that THIRD Fleet would act as a covering force to intercept and attack Japanese forces approaching from the north.[48] Indeed, Nimitz reinforced to Halsey his mission to "cover and support forces of the Southwest Pacific" three days before the battle.[49] In mission analysis, the question to ask was if THIRD Fleet's was task terrain-oriented (San Bernardino Strait), enemy-oriented (Japanese carriers), or friendly-oriented (SEVENTH Fleet landing force)?

Fleet Tactical Publication (FTP) 143(A), *War Instructions 1944*, Section III (Initiative), stated, "Loyalty to the intentions of the officer in command… is essential to the success of any operation. Subordinate commanders exercise initiative within their respective spheres of action, but always in loyal support of the intentions and general plan of their senior commanders."[50] In failing to resolve the task, Halsey risked mission failure.

Contrast Leyte Gulf to Admiral Spruance's decision in the Marianas campaign to defend the landing force at the expense of decisive engagement against Japanese carriers. Criticized as overly cautious, Spruance rightly understood his mission's objective – to secure the Marianas. As commander of Operation FORAGER, he was responsible not only for the U.S. carriers that

[47] Molenda, 36.
[48] M. Hamlin Cannon, *The War in the Pacific, Leyte: The Return to the Philippines*, U.S. Army in World War II. (Washington, DC: Center of Military History, United States Army, 1987), 193.
[49] E. B. Potter, *Nimitz*, (Annapolis, MD: Naval Institute Press, 1976), 331.
[50] Headquarters of the Commander-in-Chief, United States Fleet, *War Instructions 1944*, FTP 143(A) (Washington, DC: Government Printing Office, November 1, 1944), 4.

wished to pursue the Japanese, but the entire joint expeditionary force to include troops ashore on Saipan and the Guam assault force.[51] With correct translation of his task he understood his purpose, commander's intent, and recognized the difference between audacity and gambling. Halsey's actions were arguably in reaction to Spruance's "timid" (but correct) actions during FORAGER. Halsey missed the action at Midway due to shingles, so wanted to succeed while also avoiding Admiral Spruance's "mistake." This narrative reinforces the importance of defined doctrinal tasks to override ego and will, or at least separate the interpretive from the insubordinate. If Halsey's task was to 'block' ("to deny the enemy access to an area or prevent his advance in a direction or along an avenue of approach"), he would have retained the initiative to destroy major portions of the enemy's fleet as it approached, but would have tethered him to San Bernardino Strait in support of Admiral Kinkaid.[52]

Following World War II, A2/AD challenges posed by nuclear attack submarines and antiship missiles emerged. From 1956 to 1972 the Navy conducted the HAYSTACK and UPTIDE series of experimentation exercises in response to Soviet nuclear submarine and littoral air defense challenges. These experiments posed the same challenges as the DMO and LOCE concepts: "[h]ow can naval forces conduct effective operations while dispersing widely and minimizing communications in order to avoid detection and attack?"[53] SIXTH Fleet's methodologies of fleet dispersion and EMCON and the subsequent command and resulting control problems are germane.[54] Their solution relied on doctrine and subordinate planning participation ahead of operations to understand commander's intent and objectives when

[51] Samuel Eliot Morison, *History of United States Naval Operations in World War II vol. VIII: New Guinea and the Marianas (March 1944-August 1944*, (Boston: Little, Brown & Co., 1970), 314.
[52] MCDP 1-0, C-3.
[53] Robert G. Angevine, "Hiding in Plain Sight: The U.S. Navy and Dispersed Operations Under EMCON, 1956-1972," *Naval War College Review* 64, no. 2 (Apr 1, 2011): 90.
[54] Ibid, 89.

communications were later unavailable.[55] The UPTIDE 3-A exercise report noted the impact of EMCON "extracted a price from the BLUE forces in terms of inadequate information exchange between the BLUE OTC… and his dispersed forces."[56] UPTIDE and HAYSTACK highlighted the necessity for decentralized decision making. Armed with plans and intent before dispersion or communications disruption, commanders understood their mission and were able to seize the initiative and act aggressively.[57] Mission-type orders are essential to mission command. The Navy's adoption of tactical mission tasks would enhance subordinate understanding of their missions and enable them to take and retain the initiative required under dispersed and restrictive communications conditions.

Navy doctrine in the 1990s continued to include specific language on the role of mission control (as it was then known) and mission-type orders. Commanders assigned missions and explained intent, creating a shared vision among subordinates.[58] Subordinate understanding of intent relied on a clear statement by the commander and analysis of the mission to identify specified or implied tasks. A commander executed decentralized operations by issuing mission-type orders which specified the objective and end state. They "direct[ed] a subordinate to perform a certain task without specifying how to accomplish it."[59] A section on commander's intent appeared in the 1994 edition of NDP 1 and used Admirals Nelson and Arleigh Burke as exemplars of mission-type orders. NDP 1 (1994) also stated mission-type orders enable commanders to increase operational tempo as they can make decisions, armed with clear commander's intent, without delay.[60]

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[55] Ibid, 90.
[56] Ibid, 91.
[57] Ibid, 91.
[58] Chief of Naval Operations, *Naval Command and Control,* NDP 6 (Washington, DC: Chief of Naval Operations, May 19, 1995), 54.
[59] Ibid, 56.
[60] NDP 1 (1994), 43.

Yet in practice, the Navy understood the implications of a post-Cold War world in which the U.S. was unchallenged in sea control. Naval strategy from that time, 1992's *From the Sea* and 1994's *Forward… From the Sea,* directed the shift away from the naval fight toward projecting power ashore.[61] The Navy's emphasis on mission command and mission-type orders began to disappear from contemporary doctrine. The ersatz NDP 1 (2010) supersedes NDP 1 (1994) and NDP 6 but contains no mention of mission command or mission-type orders.[62]

Capstone Doctrine Fails to Deliver

Commander's intent is still emphasized, though to a lesser degree. NWP 3-20, *Naval Surface Warfare Manual,* is the capstone publication for surface combatant anti-surface warfare (ASUW). Its Unclassified designation supports the present examination but is also a bellwether of its contemporary Secret capstone doctrines, NWP 3-01.01, *Fleet Air Defense,* and NWP 3-21, *Fleet Antisubmarine Warfare*. It asserts the keys to coordinated surface operations are commander's intent, pre-planned responses, and operational environment awareness and that "common understanding… should exist across the entire maritime force."[63] Yet, SAG objectives are glibly enumerated as "intercept, block, track, target, engage, etc."[64]

Chapter 4 defines the surface warfare core missions as defense of the maritime maneuver area, maritime suppression, and homeland defense. Maritime suppression embodies tactical mission task doctrinal deficit: "operations against adversary surface craft to deny them an effective offensive capability by maintaining the ability to *interdict*, *intercept*, or *destroy* them if and when required" and "combine[s] maneuver and fires capabilities to *disrupt, divert, delay,*

[61] U.S. Department of the Navy, ...*From the Sea,* (Washington, DC, September 1992).
U.S. Department of the Navy, *Forward...From the Sea,* (Washington, DC, November 1994).
[62] NDP 1 (2010), iv.
[63] Office of the Chief of Naval Operations, *Naval Surface Warfare Manual,* NWP 3-20 (Washington, DC: Chief of Naval Operations, January 2007), 3-20.
[64] Ibid, 1-12.

destroy, *suppress*, or *neutralize* enemy surface ships before they can effect friendly force mission accomplishment."[emphasis added][65] This definition has nice assonance and alliteration, but little more. Tasks cannot be exchanged as fiat currency; they must be backed-up by doctrine.

Appendix A offers a vignette for examination:

> There are indications that Redland could undertake military action against Greyland [neutral country]. The Blueland National Command Authority is committed to defending Greyland sovereignty and has directed naval forces to be prepared to defeat Redland's military aggression against Greyland.[66]

Running through a mock-up of the Navy Planning Process, the vignette distills specified tasks for the core mission of maritime suppression as "prevent the enemy or other forces from occupying or using the area and to permit [friendly] forces to occupy or use the area."[67] Meanwhile, essential tasks include "move tactical forces, be prepared to defeat aggression, and remain untargeted." This analysis represents a fundamental misunderstanding of specified and essential mission tasks. Essential tasks are those tasks which not accomplished constitute mission failure.[68] If the SAG can successfully deter Redland from within a local patrol box, then the mission succeeds even if they do not move. Conversely, if the SAG remains untargeted but Redland gains local sea control, the mission fails because the commander's intent was not met. Apropos the SAG, to remain untargeted is not a task which can be accomplished; it is a tactical situation assessment of enemy disposition and capability against friendly forces. For a capstone document to display such poor understanding of specified and implied tasks, it is no wonder the Navy lacks doctrine on tactical mission tasks.

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[65] NWP 3-20, 4-4.
[66] Ibid, A-2.
[67] Ibid, A-4.
[68] Joint Chiefs of Staff, *Joint Planning*, JP 5-0 (Washington, DC: Joint Chiefs of Staff, June 16, 2017), V-11.

The beguilingly titled OPNAVINST 3500.38B, *Universal Naval Task List* (UNTL), should fill this gap. It is "designed as an interoperability tool for joint force and naval commanders to use as a master menu of tasks… that provides a common language and structure for the development of naval mission essential task lists (NMETLs)."[69] The document's contents are familiar to any Sailor who operates the Training and Operational Readiness Information Services (TORIS) software. NMETLs are training objectives. They define the conditions and standards to conduct mobility and warfare area training on individual ships and for strike group certification for major combat operations (MCO) at Composite Unit Training Exercise (COMPTUEX).[70] Far from describing "*what* the naval forces are to perform or accomplish in support of any requirement or assigned mission," they enumerate minutiae six echelons deep such as Naval Task (NTA) 1.1.2.3.3.2 Launch Aircraft.[71]

If the UNTL's purpose, contrary to stated intention, is to codify training tasks to prepare units for MCO, it still fails to define its tasks. Instead of friendly, enemy, or terrain objectives, success is measured by standards, in the example of Launch Aircraft, as hours to initiate launch, number of aircraft available, or number of aircraft launched.[72] Seeking a proper tactical mission task, NTA 1.5.3 Conduct Attack offers the same confabulation to 'defeat', 'destroy', or 'neutralize' the enemy.[73] Each NTA is supported by doctrinal citation for context. "Conduct

[69] OPNAVINST 3500.38B, 1-1.
[70] COMPTUEX, or C2X, is a "certification exercise that assesses a strike group's ability to conduct military operations at sea and project power ashore through joint planning and execution of challenging and realistic training scenarios." (https://www.navy.mil/submit/display.asp?story_id=108427)
[71] OPNAVINST 3500.38B, 2.2.
"To launch aircraft from ships. This task covers all fixed-wing, tilt-rotor, and helicopter aircraft launch operations from ships, surface combatants and all other applicable sea vessels. This task requires the safe and efficient execution of all procedures applicable to launch, including: prelaunch procedures, launch procedures, instrument and visual departure procedures, departure communications procedures, departure rendezvous procedures, emergency recovery procedures, tanker procedures, and procedures for diversion of aircraft.", 3-B-6.
[72] Ibid, 3-B-6.
[73] Ibid, 3-B-24.

Attack" cites NWP 3-05 Rev D, *Naval Special Warfare*, and NTTP 3-06.1, *Riverine Operations*. Tasks are undefined and the references infer they have no application in the conventional fleet. Standards for "Conduct Attack" are casualties of attacking forces (in percentage and total numbers), percent of high-payoff or high priority targets damaged or destroyed, or percent of enemy force held in position.

Orienting toward tasks with fleet applicability, NTA 3.2 Attack Targets seeks to 'destroy', 'degrade', or 'disable'.[74] Yet one echelon down, NTA 3.2.1 Attack Enemy Maritime Targets, only 'degrade' is stated. This reinforces the interpretation that these tactical mission tasks are all interchangeable without any concern to nuance in endstate and commander's intent. NTA 3.2.1.1 Attack Surface Targets appears four echelons deep. Army and Marine tactical mission tasks do not draw distinctions in their targets or objectives. The task is applicable to any enemy – infantry, armor, artillery – and any terrain – bridge, ridgeline, valley. The UNTL heavily caveats each task by type and form to ascribe different conditions and standards for application in training and certification assessment, not use in mission-type orders.

A Case for Naval Tactical Mission Tasks

Succinct Orders

The Navy's lack of tactical mission tasks results in lengthened orders with imprecise language. A keyword search in the Defense Technical Information Center (DTIC) and Naval Postgraduate School Calhoun repositories for "mission command", "mission-type orders", and "tactical mission tasks" yield theses on systems engineering approaches to C2. Titles such as "Command and Control for Distributed Lethality", "A Systems Architecture for Operational Distributed Lethality", and "Development of System Architecture to Investigate the Impact of

[74] OPNAVINST 3500.38B, 3-B-45.

Integrated Air and Missile Defense in a Distributed Lethality Environment" focus on the C2 process, but not the message.[75]

NDP 6 asserted:

> Before the advent of radio… [the nature of communications] demanded senior commander state his intent clearly, to ensure that his ships' captains and landing force commanders operated according to the larger plan. Armed with commander's intent, subordinates were expected to conduct a wide range of operations on their own initiative.[76]

This is an enduring characteristic of command, irrespective of radio. In 2002, then-Vice Admiral Willard, Commander SEVENTH Fleet, wrote, "We in the U.S. military made a mistake when we combined command and control with communications and computers to yield the C4 acronym."[77] Dr. Robert Rubel, former dean of the Center for Naval Warfare Studies at the Naval War College, observed that advances in communications are historically matched by increased weapons ranges and distance between friendly units.[78] As one Commander surmised from Admiral Willard, "focusing on the medium will drive technical solutions, while focusing on the message points to procedural and doctrinal solutions."[79] The answer isn't a better system; it's better doctrine.

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[75] Logan Corbett et al., "Command and Control for Distributed Lethality," (capstone project report, Naval Postgraduate School, June 2017).
Clay I. Johnson, "A Systems Architecture for Operational Distributed Lethality," (capstone project report, Naval Postgraduate School, 2016).
Justin K. Davis, "Development of System Architecture to Investigate the Impact of Integrated Air and Missile Defense in a Distributed Lethality Environment," (master's thesis, Naval Postgraduate School, December 2017).
[76] NDP 6, 9.
[77] ADM(ret) Robert F. Willard, "Rediscover the Art of Command and Control," U.S. Naval Institute, *Proceedings* 128, no. 10 (October 2002), 52.
[78] Rubel, 115.
[79] CDR(ret) Carl Graham, "The Mirage of Mission Command," United States Naval Institute, *Proceedings* 144, no. 8 (August 2018): 1386.

To highlight this point, a task commonly issued to surface combatants detached from the strike group to conduct antisubmarine warfare (ASW) is 'sanitize' the waterspace ahead of the carrier's transit. Mission-type orders should define the mission and leave the "how" of executing to the subordinate. 'Sanitize' is problematic because it is not supported in doctrine, and thus, leaves significant room for errors in interpretation and execution. First, 'sanitize' is ambiguous on task orientation. Is it terrain-oriented, focused on the waterspace, or enemy-oriented, focused on the submarine? Second, it leaves open for interpretation not only the "how" of the mission, also the "what". It fails to convey the desired end state if a submarine is found. Assuming enemy-orientation, is submarine detection enough to initiate a branch plan for alternate transit route or does the submarine require attack? If attack, does it need to successfully destroy the submarine, or will its retreat suffice? Is pursuit beyond the waterspace of interest necessary or desirable? Or can the ship's use of active sonar drive the submarine from the area for fear of detection? Assuming terrain-orientation, is the ship required to establish local sea control or can it maintain standoff and hold the submarine at risk through sensors and weapons? What of submarines outside the designated waterspace which can affect friendly operations within it?

The Army's FM 3-90, *Tactics,* Appendix B provides an example of the clarity achievable through doctrinal tactical mission tasks. Consider the tasks 'control', 'secure', and 'clear. 'Control' maintains "physical influence over a specified area to prevent its use by an enemy or to create conditions necessary for successful friendly operations."[80] It does not require complete clearance of all enemy forces and the enemy can still engage within the controlled area. 'Secure' "prevents a unit [aircraft carrier in this example], facility, or geographical location [sea line of communication (SLOC)] from being damaged or destroyed as a result of enemy action."[81]

[80] FM 3-90, B-6.
[81] Ibid, B-11.

'Secure' not only prevents enemy forces from occupying a location, but also prevents enemy fires from impacting it. 'Clear' "remove[s] all enemy forces and eliminate[s] organized resistance within an assigned area… by destroying, capturing, or forcing the withdrawal of enemy forces so they cannot interfere with the friendly unit's mission."[82] Any of these tasks work depending how the commander intended 'sanitize'. Tactical mission tasks would normalize the naval commander's vocabulary to issue succinct mission-type orders with confidence in subordinate understanding of the mission, desired end state, and commander's intent in a single word.

Retired Navy Captain Wayne Hughes's *Fleet Tactics and Naval Operations* admonishes the maxim of naval tactics: "attack effectively first" but admits this is not helpful advice in specific situations.[83] What is the desired result? Dr. Rubel writes that tactical combat at sea has three basic modes: structured battle, melee, and sniping.[84] He observes structured battle (coordinated action among the units of a force) may be desired in dispersed missile combat to coordinate over-the-horizon targeting and achieve mass, but peer adversaries will disrupt networks and communication. What is left is melee (units fighting on their own without coordination) and sniping (ambush warfare) for which mission-type orders are well suited.[85] In an environment where networks are unable to provide target-quality data, commanders will need to rely on guidance received, particularly pertaining to "what to shoot and when."[86] *War Instructions 1944*, Section VII, (Doctrines of Action) directs: "Exploit immediately favorable situations resulting from well laid plans, or from chance. *Extend such victories to complete*

[82] FM 3-90, B-6.
[83] CAPT(ret) Wayne P. Hughes, *Fleet Tactics and Naval Operations, 3d ed,* (Annapolis, MD: Naval Institute Press, 2018), 32.
[84] Rubel, 116.
[85] Ibid, 122.
[86] Ibid, 123.

annihilation of the enemy."[emphasis original][87] This form of melee combat relies on mission-type orders and with clear commander's intent.

Admiral Rowden's distributed lethality paper offers a SAG hypothetical. While distributed lethality has since matured into the broader DMO concept, what follows does not argue the merits of either operating concept but rather how the Navy talks about operations:

> A three-ship SAG deploys in vicinity of a small, abandoned island with an airfield the JFMCC [Joint Force Maritime Component Commander] plans to seize for EABO [Expeditionary Advance Base Operations] of Marine F-35Bs. An enemy ASUW SAG and unlocated diesel submarine (SSK) are to the North. The U.S. SAG's mission is to place itself between the adversary and the island and conduct reconnaissance of the island, while also locating, targeting, and neutralizing adversary surface and subsurface forces in the area; and destroy any enemy attempt to garrison the airfield before the arrival of the Marine F-35Bs. Once those aircraft begin operations, the SAG will be required to provide for their defense from the sea.[88]

Recognizing this mission statement was not drafted for an operation order (OPORD), it is useful to analyze its tactical mission tasks to highlight the superfluous language, unnecessary length, and ambiguous direction it provides. In Navy doctrine, the commander infers nothing from the JFMCC's intention to 'seize' the airfield with regards to the desired infrastructure condition. MCDP 1-0 Appendix C details how 'secure' would be a more appropriate task than 'seize'. While both are terrain-oriented tasks, 'seize' occurs against enemy opposition while 'secure' may not, but 'secure' requires preventing destruction or loss by enemy action.[89]

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[87] FTP 143(A), 6.
[88] Rowden et al., 20.
[89] Headquarters US Marine Corps, *Marine Corps Operations*, MCDP 1-0 (Washington, DC: Headquarters US Marine Corps, July 26, 2017),C-8.

'Secure' better reflects the desired end state and necessitates different planning than if Seabees are relied on to reconstruct a destroyed airfield à la Henderson Field at Guadalcanal.

Next, the mission's direction to place the force between the adversary and the island violates mission-type orders' dictum to leave the "how" to commanders executing the mission. Given the SSK's datum 120 nautical miles North is 24 hours old, ASW prosecution may preclude maintaining position between the island and enemy SAG. The commander's intents are focused on the airfield and enemy disposition, not the SAG's relative position between them. This order obfuscates the true objectives and potentially hazards the SAG by placing it in a 360-degree submarine threat environment.

Nothing provided in the task and purpose or commander's intent illuminates task prioritization. The same sentence ordering reconnaissance also assigns the SAG to locate, target, and neutralize enemy forces in the area. An ordinal interpretation of the order would place priority on reconnaissance over neutralization. As the distributed lethality paper later reveals, the purpose of reconnaissance is to identify special operation forces attempting to insert and secure the island. This task effectively countermands the tasks aimed against the enemy SAG and SSK. The embarked MH-60R Seahawk helicopters and MQ-8 Fire Scout unmanned aerial vehicles would be challenged to accomplish persistent observation with adequate revisit time when these assets are required for ASW and ASUW.

The tasks 'locate' and 'target' are inherent to the ASUW detect-to-engage sequence Find-Fix-Track-Target-Engage-Assess (F2T2EA).[90] They are implied tasks to a specified tactical mission task, and thus superfluous. 'Neutralize' is as equally equivocal in Navy doctrine as 'sanitize'. It is often used interchangeably with 'defeat' and 'destroy'. In MCDP 1-0,

[90] NWP 3-20, 3-1.

'neutralize' "render[s] the enemy or his resources ineffective or unusable. As an effect of fires delivered, to render a target ineffective or unusable thereby degrading the enemy's capability of accomplishing its mission."[91] Weapons are not necessarily brought to bear to neutralize an enemy. An enemy held at risk beyond its threat weapons engagement zone is neutralized. Yet the order's inclusion of 'locate' and 'target' implies a desire for kinetic action akin to what the Navy terms a mission kill. If the commander intends a greater effect, a task defined similarly to the Marines' 'destroy' – "to physically render… a target or capability so damaged that it can neither function as intended nor be restored to a useable condition" – is appropriate.[92]

When the mission does order 'destroy', it is improperly applied to the enemy's attempt to garrison. The task is a verb set against another verb. Additionally, selecting an enemy-oriented task and limiting enemy action to garrison activity neglects the enemy course of action to destroy the airfield. The task should reflect the terrain-oriented desired end state: Marine F-35 EABO from the airfield. This is already defined as 'secure' in earlier mission analysis. In practice, maritime and aviation forces do not 'secure' terrain ashore without augmentation by a land force. Army and Marine tactical mission tasks are not a one-for-one transfer to the Navy, nor is that argued. But it does illustrate the benefits of doctrinally defined tasks to abbreviate and clarify mission-type orders.

Finally, 'defense' is a valid task; it appropriately shifts operational focus from terrain-oriented to friendly-oriented and succinctly frames the commander's intent. However, "from the sea" is banal. The instructions are in the title "Navy"; it doesn't need to be qualified that naval forces operate in water.

An alternate mission-type order with tactical mission tasks may then read:

[91] MCDP 1-0, C-6.
[92] Ibid, C-4.

MISSION: SAG secures OBJ (island) NLT (date time group) in order to prevent enemy attempts to garrison the airfield and support subsequent JFMCC operations which include EABO by adjacent Marine forces.

OPORD Paragraph 3 (Execution) would include commander's intent typically organized with expanded purpose, key tasks, and desired end state.

Increase Joint Interoperability

In the Goldwater-Nichols 1986 era, doctrinal concepts tend to reflect Army usage. This coincides with another of Captain Hughes's cornerstones: the seat of purpose is on the land.[93] Yet the Navy's tradition of mission command is rooted in operations at sea and it should be recognized that not all of its language is compatible with the land component, nor should it be made so. But the Navy's integration of doctrinal tactical mission tasks is required to increase coordination in joint operations such as LOCE. Focused on the Navy-Marine Corps team operating at Fleet Commander/JFMCC level, LOCE attempts to address CWC construct shortfalls and calls for common tactical C2 doctrine. While CWC's decentralized execution is compatible with the Marine Corps' mission tactics maneuver warfare doctrine, they are not rooted in common language.[94] There is an old joke about how the four Services respond to the order to 'secure' the Officer's Club, with the Marines assaulting the building with overlapping fields of fire and the Navy turning off the lights and locking the door. A single commander of Sailors and Marines cannot promote unity of effort, deliver commander's intent, nor issue mission-type orders without "[a]dherence to doctrine [which] provides a basic vernacular with

[93] Hughes, 24.
[94] LOCE, 10.

which Services can communicate."[95] Whether the Marine Air-Ground Task Force (MAGTF) commander is incorporated into CWC as STWC or a new Expeditionary Warfare Commander (EXWC) position is irrelevant; missions need to be understood by both Services. In proposing capabilities to the warfighting functions, LOCE asserts the necessity of fires to integrate Navy and Marine lethal and non-lethal effects. Unity of effort to generate those effects must be achieved through doctrine.

Consider a destroyer tasked with naval surface fire support of an amphibious assault. The mission statement calls to "secure a working sea point of departure". The destroyer receives a call-for-fire mission into the port from the naval gunnery liaison officer ashore. The destroyer commander's understanding of the task 'secure' should influence their decision to execute that fires mission at the risk of overall mission failure. If heavy-lift cranes required for maritime preposition force offload are destroyed, then as part of a larger campaign to project Marine combat power ashore, the mission is a failure. This is hypothetical, but it serves to demonstrate the importance of doctrine in communications.

Air Operations in Maritime Surface Warfare (AOMSW) doctrine on the other hand provides a unit-tactical example of how doctrinally defined tasks drive unity of effort. In the absence of an aircraft carrier and its airwing in the Arabian Gulf, Naval Forces Central Command needed to get land-based fighters and Navy cruisers and destroyers on one piece of paper. AOMSW enables joint and coalition air assets, such as the U.S. Air Force, to support maritime surface warfare.[96] The tasks 'investigate', 'target', and 'smack' are the distillation of three paragraphs' worth of different rules of engagement, positive identification, collateral

[95] NDP 1 (2010), iv.
[96] Naval Warfare Development Command, *Multi-Service Tactics, Techniques, and Procedures for Air Operations in Maritime Surface Warfare*, NTTP 3-20.8 (Norfolk, VA: NWDC, February 15, 2016), 1.

damage estimate, and target/track correlation requirements.[97] This codification enables an Air Force F-15 conducting strike coordination and reconnaissance under a destroyer's control to receive the order 'investigate', 'target', or 'smack' and understand their mission, despite the Service difference.

An argument against the Navy's adoption of tactical mission tasks is that the Army and Marines have these tasks and still struggle to conduct mission command. A study conducted a decade after the Army adopted mission command examined tactical-level mission orders doctrine and found varied understanding of even basic terms like "mission" and "mission command."[98] How would expanding to the Navy enhance Joint operations when single Services cannot get it right? Evidence of personnel, education, and training deficiencies, and the overreliance on precision munitions and information-heavy C2 anchor the Services to firepower and technology.[99] The Navy indelibly suffers the same shortcomings as the land component. Operating concepts like JAM-GC indicate the future fight is not only distributed in a comms denied environment, but is also Joint. Concepts and doctrine contemporary to General Dempsey's mission command white paper such as "assured C2" in the *Navy Strategy for Achieving Information Dominance 2013-2017* and Tactical Memo (TM) 3-56.1-12, *Command and Control in a Denied or Degraded Environment (C2D2E)*, missed the Chairman's admonishment against reliance on technological superiority.[100] The Army and Marines' obstacle is in practice, not doctrine. In the Navy, it is both.

Expand Tactical Options

[97] Ibid, 28.
[98] Shamir, 163.
[99] Ibid, 197.
[100] Dempsey, 3.

A lack of doctrinal tactical mission tasks also truncates the tactical menu available to commanders. Dr. Graham Allison's seminal *Conceptual Models and the Cuban Missile Crisis* provides a framework to understand such decision outcomes. Allison's second conceptual model, Organizational Process, highlights how routines and standard operating procedures restrict decision outcomes.[101] The ability to describe one thing provides the ability to differentiate between a similar thing. Surface fleet fundamentals emphasize marlinspike seamanship. Different line handling commands generate different actions by the crew on deck in order to nest the ship alongside a pier. The variety of commands provide options to make necessary adjustments. The order to "surge", "check", or "hold" a line communicates the difference between a line with moderate tension allowed to slip, heavy tension but eased to prevent parting, or keeping tension until the line parts, respectively. Failure to issue the correct order or understand the order received may result in allision with the pier or injury and death of Sailors on deck. The same flexibility and consequences are true of tactical mission task language.

Examples from the Army's FM 3-90, *Tactics*, applied to naval operations illustrate the expanded tactical options. 'Canalize' "restricts enemy movement to a narrow zone by exploiting terrain coupled with the use of obstacles, fires, or friendly maneuver."[102] Applied to ASW, undersea mounts and trenches, frontal boundaries, and littorals impact adversary movement like topography on land. Ships and aircraft of a search and attack unit (SAU) ordered to 'canalize' could employ maneuver, sonobuoy placement, and radar flooding to canalize an enemy

[101] Graham T. Allison, "Conceptual Models and the Cuban Missile Crisis," *The American Political Science Review* 63, no. 3 (September 1969): 698.
[102] FM 3-90, B-14.

submarine into restrictive bathymetry or advantageous sound propagation and detection for an awaiting friendly force ambush.

In SAG versus SAG operations, the mission task 'turn' would force the enemy SAG from "one avenue of approach or movement corridor to another".[103] This task could shape local sea control of straits and SLOCs to force an enemy SAG from an area of operations. Coordinated surface-submarine action is difficult due to the nature of communication between units. The SAG could enhance coordination by turning the enemy SAG into friendly-occupied waterspace for submarine attack.

'Fix' and 'bypass' could be used in coordinated SAG operations to create gaps in A2/AD coverage and enable a follow-on ESG to pass in support of EABO. The fixing SAG would prevent the enemy from moving any part of its force from a specific location for a specific period.[104] As a shaping operation it would enable to ESG to bypass enemy defenses to "maintain the momentum of the operation while deliberately avoiding combat with an enemy force."[105]

Language shapes thought and the lack of diversity in operational forms of maneuver and tactical mission tasks manifests in lazy and predictable execution. A prime example is the surface fleet's indefatigable use of the circular screen in which combatants are arrayed equilaterally around the carrier without regard to mission, individual ship capabilities, and the old maxim that "the order of sailing should be the order of battle."[106]

Promote Subordinate Initiative

Addressing mission task doctrinal gaps will facilitate subordinate commanders retaining the initiative to accomplish their missions and achieve desired endstates within the higher

[103] Ibid, B-19.
[104] FM 3-90, B-17.
[105] Ibid, B-4.
[106] Knox (1914), 1012.

commander's intent. Junior officers write disconsolately in professional military education theses and professional journal articles about micromanagement by commanders. This argument fails to recognize, a) the O-3 to O-5 leadership gap is the largest in terms of years' experience, and thus necessitates the seniors' tutelage, and b) the authors' hubris. Commanders do not care if a subordinate *feels* like they are being micromanaged; as one senior Army officer put it, "throw that individual's ego out the door… it's about the larger organization."[107] But the commander does care about their subordinate leaders feeling like they have the latitude to rapidly adjust and adapt their operational approaches to achieve the commander's desired endstate and objectives within their intent. This is the spirit of mission command and allows friendly forces to retain the initiative instead of always reacting to enemy actions.

TRADOC commander General Townsend presents a challenge Army leaders face buying into the tenets of mission command as "leadership by CONOP".[108] Concepts of Operation (CONOP) provide a brief verbal or graphic statement that clearly and concisely expresses the commander's intent and desired endstate.[109] PowerPoint CONOPs, issued to subordinates to illustrate the mission and drafted by subordinates for commander's approval, are the norm in many commands. In Iraq and Afghanistan, for instance, commanders imposed CONOPs-approval on the lowest levels when U.S. forces failed to place local national security force partners in the lead of military actions.[110] The requirement for CONOP was meant to discipline U.S. strategy, which set local national lead as a precondition for U.S. withdrawal. This requirement was interpreted as "micromanagement" by junior leaders. What the junior leaders

[107] Senior Army officer, email message to author, February 3, 2019.
[108] Kyle Rempfer, "The past decade of war has eroded the decision-making confidence of young leaders, Army general says," *Army Times*, January 9, 2019, https://www.armytimes.com/news/your-army/2019/01/09/the-past-decade-of-war-has-eroded-the-decision-making-confidence-of-young-leaders-army-general-says/
[109] JP 5-0, GL-7.
[110] Senior Army officer, email message to author, February 3, 2019.

misunderstood was their failure to perform their task and operate within intent negatively impacted operations at strategic levels. Leadership by CONOP is prevalent in the Navy with graphics-laden presentations supplanting standard five paragraph OPORDs as primary source document. The irony is staffs and ship CICs struggle with version control and internet bandwidth constraints to pass megabyte files (in permissive electromagnetic environments, no less), while the text-file OPORD would provide all the guidance necessary with doctrinal tactical mission tasks backing it up.

NWP 3-56 touches on the standard five paragraph OPORD, highlighting the essential tasks of Paragraph 2 (Mission) and the specified objectives, tasks, and purpose of Paragraph 3 (Execution).[111] NWP 3-56 fails to make an important connection which enables subordinate initiative. Paragraph 3 lists the expanded purpose, key tasks, and endstate under the Commander's Intent section and Paragraph 1 (Situation) describes the commander's intent two-levels up. Armed with this information, the OPORD serves as mission-type orders and a CONOP is superfluous. The subordinate is enabled to act with disciplined initiative within commander's intent to seize and maintain the initiative and act at a greater tempo than the adversary's decision cycle. OPNAVINST 3500.38B, *Universal Naval Task List*, defines mission type orders as:

1. Order issued to a lower unit that includes the accomplishment of the total mission assigned to the higher headquarters.

2. Order to a unit to perform a mission without specifying how it is to be accomplished."[112]

[111] NWP 3-56, 9-5.
[112] Department of the Navy, Universal Naval Task List. Instruction 3500.38B. Washington, DC: Department of the Navy, January 30, 2007, 529.

The doctrine missing within the Navy are task actions which specify what to accomplish.

CONOPs support the science of control, the "aspects of operation which can be analyzed and measured: movement rates, fuel consumption, weapons effects, rules of engagement, and legal considerations."[113] However, a commander's inability to control in denied and degraded environments is the reason why it is called mission *command* and not mission *control*. The lack of tactical mission tasks weakens the OPORD, hinders subordinate initiative, and fosters diffident leaders. If subordinates understand the desired endstate and purpose of an operation, that enables them to rapidly adjust their methods while continuing to be nested within higher command's desired endstate (i.e., disciplined initiative within the commander's intent).

NWP 3-20 asserts "connectivity will be a key part of maintaining [situational awareness] from the SAG to the strike group and to the theater level. As an independent group, the SAG must have sufficient information to ensure that actions are consistent with the overall force objectives."[114] Again, the nature of future war rejects the assumption of connectivity and this premise proves faulty. The future will necessitate operating without technology or precise information. The Navy needs to become comfortable with uncomfortable silence. Guided by doctrine-defined tasks, initiative is enabled.

Conclusion

The CNO's December 2018 *Design for Maintaining Maritime Superiority Ver. 2.0* provides the Navy operational guidance along four lines of effort to link strategy with execution. Task eight of the first LOE, Strengthen Naval Power at and from the Sea, seeks to "Invigorate and continually reinforce our culture of mission command, which is an enduring advantage

[113] ADP 6-0, 8.
[114] NWP 3-20, 1-11.

against any adversary."[115] Dr. Milan Vego, professor of operations at the Naval War College, states:

> The key prerequisites for the success of mission command are a proper understanding of the Clausewitzian teaching of the nature of war, a highly educated and trained force, excellent relationships between higher commanders and subordinates, a common operational or tactical outlook, sufficient freedom to act, and a common vocabulary.[116]

The latter is a shortfall in Navy doctrine. Tactical mission tasks would clarify orders with succinct, meaningful language; improve Joint interoperability; expand tactical options; and enhance subordinate initiative.

The Navy's return to sea control as a primary mission requires disciplined and effective communications in denied and degraded environments. A doctrinal vocabulary of tactical mission tasks enables commanders to issue concise mission-type orders which convey their intent. The Navy's Warfighting Development Commands and forthcoming OPNAV N7 (Deputy Chief of Naval Operations for Warfighting Development) are primed to develop naval tactical mission task doctrine. In writing such, they should strive to align tasks to Joint where possible (an important caveat which recognizes Service differences). There is no benefit in changing ASW terminology to match that of an armor engagement. However, unity of effort in Joint operations and the ability to issue concise mission-type orders relies on commonly understood language. Success will depend in part on mission command and the language which knits the Services together.

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[115] A Design for Maintaining Maritime Superiority ver 2.0, 9.
[116] Milan Vego, "Mission Command and Zero Error Tolerance Cannot Coexist," United States Naval Institute. *Proceedings* 144, no. 7 (July 2018): 1385.

These tasks should be scalable by operational unit (e.g., SAG, SAU, CSG, Carrier Strike Force) and doctrine should be written to expand and coordinate task execution at echelon. Army doctrine addresses how tactical tasks and operations apply at echelon (platoon, company, battalion, brigade) and by type of Brigade Combat Team (Infantry, Stryker, Armor).[117] Navy Tactical Reference Publications (NTRP) 3-20.6 (series), *Class Tactical Publications*, provide an existing framework at the unit-level. If the battlespace is to be taken as an indivisible entity, as the Single-Battle Concept advocates, then tactical tasks scaled up and down for the different operational forms of maneuver promotes unity of effort.[118] Tasks should be aligned along three lines of operation:

1) Actions by Friendly Force – that which can be done to shape the battlespace

2) Effects on Enemy Force – that which alters enemy disposition

3) Terrain-Oriented Tactical Tasks – outer space to seabed.

Finally, "officers must be taught how to receive and give mission-type orders, and critically, how to clearly express intent."[119] When to execute mission command over centralized control is a matter of trust, experience, maturity, intelligence, and abilities of subordinates. Leaders need the confidence to give and receive concise, mission-type orders and not rely on loquacious detail or comms connectivity to understand and execute their task.

Doctrine is the glue of tactics.[120] Service and Joint operating concepts reflect General Dempsey's assessment that future conflict necessitates decentralized and distributed operations beyond the current level of comfort. As Lieutenant Commander Knox observed, "Lengthy,

[117] CF: FM 3-21.8, *Infantry Platoon and Squad*; ATP 3-21.10, *Infantry Rifle Company*; FM 3-21.20, *The Infantry Battalion*; FM 3-96, *Brigade Combat Team*; and FM 3-21.21, *The Stryker BCT Infantry Battalion*.
[118] Headquarters, U.S. Marine Corps, *Marine Corps Planning Process*, MCWP 5-10 (Washington, DC: Headquarters U.S. Marine Corps, May 2, 2016), 1-6.
[119] Dempsey, 6.
[120] Hughes, 20.

detailed orders kill initiative, and engender a spirit of blind obedience to the same to the letter."[121] Initiative is essential in naval warfare and mission command will promote Fleet initiative. A doctrine of tactical mission tasks is a first step.

[121] Knox (1913), 57.

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