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T. B. KRAFT
1. NTTP 3-32.1 (APR 2013), MARITIME OPERATIONS CENTER, is available in the Navy Warfare Library. It is effective upon receipt.

2. Summary: NTTP 3-32.1 builds upon the foundation established in NWP 3-32, Maritime Operations at the Operational Level of War, and describes the maritime operations center philosophy and organization. It provides guidance for the formation and functioning of a MOC, as well as fundamentals and a generic template to organize the MOC to conduct operations in support of a commander who has been designated as a Navy component commander or joint/combined (or coalition) force maritime component commander.

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PREFACE

SCOPE

NTTP 3-32.1, Maritime Operations Center, builds on the foundation established in NWP 3-32, Maritime Operations at the Operational Level of War, and describes the maritime operations center (MOC) philosophy and organization. It has been developed in recognition that today’s fast-paced and multifaceted operational environment demands a more standardized approach across the full range of military operations. This publication should be considered a living document. It and each future revision should bring all United States Navy commands a step closer to common tactics, techniques, and procedures at the operational level.

Success in the modern maritime operational environment requires working with elements of the joint force, multinational partners, and maritime commanders. The conduct of modern maritime operations requires a command and control (C2) system and processes that support planning and execution from the strategic, through operational, to tactical levels. Forces at the tactical level, directed by operational-level commanders, conduct missions that support attainment of operational, strategic, and national objectives.

The maritime component routinely conducts operations simultaneously across all domains described in Joint Publication (JP) 3-0, Joint Operations, air, land, maritime, space, and the information environment. The maritime domain is defined in JP 3-32 as “the oceans, seas, bays, estuaries, islands, coastal areas, and the airspace above these, including the littorals.” This joint definition has fundamental implications for the Navy’s role in joint operations. The Navy is the principal warfighting organization that conducts operations over, on, under, and adjacent to the seas: overlying airspaces, surfaces, subsurfaces, and the ocean bottom, as well as the shoreline infrastructures that affect maritime operations. The creation of United States Cyber Command resulted from Department of Defense’s understanding that cyberspace has become a critical warfighting domain.1 As a result, Navy operational-level commanders must be positioned to rapidly identify the operational impacts of denials and degradations and implement mitigation strategies that are aligned across both the regional and global chain of command. This will require proactive command and control of Navy and joint mission partners’ sensor, network, and decision aid architectures to assure command and control in an increasingly uncertain communications environment.

The U.S. Navy’s culture has evolved to meet the uniqueness of operations in the maritime domain. With mission-tailored and multimission platforms, the Navy is capable of attaining maritime superiority or supremacy. The design and tactical employment of its forces have evolved over 225 years of naval history and experience. Modern naval platforms have a wide range of capabilities specifically designed to counter threats in the maritime domain and to project power throughout all domains. Navy platforms operate in a very dynamic environment that includes ships, submarines, and aircraft from potential adversaries and neutral parties. Ships and aircraft are constantly in motion, presenting a constant challenge to gain and maintain situational awareness.

The maritime commander wields sea power in support of the JFC’s objectives. The MOC should be viewed as a warfighting capability, a weapons system integral to the operational level of war. It serves as the core of the operational-to-tactical planning, execution, and assessment capability of the staff in support of the maritime commander. It is the central node for the execution and monitoring of all of the maritime commander’s joint operational responsibilities. Primary activities at the operational level of war include linking tactics and strategy by establishing operational objectives and conditions needed to achieve strategic objectives; sequencing events to achieve operational conditions; and initiating actions and applying resources to execute and sustain these events. In its design, the MOC initiative was intended to enable MOC-to-MOC and MOC-to-peer functionality to support the JFC’s objectives. The operational-level staff, using the resources of the MOC, links the various operations

1 Secretary of Defense Transitional Cyberspace Operations Command and Control Concept of Operations dated 01 May 12.
together into a campaign plan and coordinates the six operational functions of fires; C2; intelligence; movement and maneuver; protection; and sustainment.

Working with the other component commanders through the supporting/supported command relationships designated by the joint force commander, Navy forces are optimized to contribute to operational success in and from the maritime environment. Navy component commanders (NCCs) and numbered fleet commanders and their staffs operate principally at the operational level. Commands/staffs below the numbered fleet level (e.g., task force commanders and their staffs) provide input to operational-level planning and coordination but their principal focus is at the tactical level. The operational level focuses on learning about an unfamiliar problem(s) and exploiting that understanding to create a broad approach to problem solving. This focus creates an operational design that the tactical-level commander can follow to create a detailed plan of action.

The MOC principally expands the functional capability of the maritime commander by providing enduring oversight and planning capability to address operational and tactical contingency response operations, as well as manage any allocated or assigned forces under the command and control of the maritime commander. The MOC, to be most effective, is designed to be flexible (capable of adjusting to changing fleet priorities), tailorable (capable of smooth transition as the commander is assigned different roles), and scalable (capable of integrating additional capacity or capabilities in response to new missions and/or increasing operational intensity level). Additionally, the MOC may be required to flex to different locations, systems architectures, and collaborative environments based on mission and still maintain effectiveness on enduring or emergent missions.

The success of the mission relies on the ability to link tactical actions to operational and strategic objectives. This publication demonstrates the linkage of specific various joint publications (JP 3-33, Joint Task Force Headquarters; JP 3-32, Command and Control for Joint Maritime Operations; JP 3-30, Command and Control for Joint Air Operations) to naval doctrinal publications such as NWP 3-32, Maritime Operations at the Operational Level of War; NWP 3-56, Composite Warfare Doctrine; NWP 3-30, Naval Command and Control of Air Operations; NWP 5-01, Navy Planning; and NTTP 3-32.1, Maritime Operations Center. It aids in understanding how each relate to maritime operations at Navy component and numbered fleet headquarters.

OVERVIEW

Chapter 1 (Introduction) describes the purpose of the publication and introduces the cross-functional and collaborative approach that drives how a MOC is organized and operates. This chapter provides considerations and a standard for organizing a MOC and describes key responsibilities focused on the operational level. It defines the boards, bureaus, centers, cells, and working groups, as well as elements, groups, offices, planning teams, and other coordinating bodies, that support the commander’s decision cycle and battle rhythm.

Chapters 2 through 6 (Intelligence, Operations, Logistics, Plans, and Communications and Information Systems) describe the MOC and the associated cross-functional teams (CFTs) that conduct these major functions. Each entity is described by its particular functions, composition, points of coordination, inputs, and outputs. Four major centers are described: the maritime intelligence operations center, the fleet command center, the logistics readiness center, and Communications and Information Systems Center/Navy Communication Systems Coordination Center.

Chapter 7 (Administration, Manpower, and Personnel) describes the essential supporting functions and the entities assigned within the MOC organization.

Appendix A (Key Personnel and Special Staff) describes key staff officers with particular background and experience who not only provide advice directly to the commander but also advise other principal staff officers, staff directorates, and the MOC’s CFTs.

Appendix B (Liaison) describes the contact or intercommunications between elements of military forces or other agencies to ensure mutual understanding and unity of purpose and action. This appendix details roles, requirements, integration, and responsibilities when employing liaison officers.
Appendix C (Maritime Operations Center Organization and Augmentation) explains the frequent need for commanders to customize their staffs and subordinate forces to accomplish their combatant commander-assigned missions. It discusses organizational and augmentation practices and includes example scenarios that illustrate how these practices are employed in the MOC.

Appendix D (Assured Command and Control) provides detail and application of assured C2 concepts, illustrating their role in successful command and control of C2 systems and architectures.

Appendix E (Maritime Deliberate Targeting) provides a primer in the deliberate targeting process and describes the phases, systems, and elements employed throughout the deliberate targeting process.

Appendix F (Theater Security Cooperation Planning and Assessment) provides basic insight into the role of the MOC in facilitating effective planning and assessment of a theater security cooperation campaign.

Unless otherwise stated, masculine nouns and pronouns do not refer exclusively to men.

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WARNINGS, CAUTIONS, AND NOTES

The following definitions apply to warnings, cautions, and notes used in this manual:

**WARNING**

An operating procedure, practice, or condition that may result in injury or death if not carefully observed or followed.

**CAUTION**

An operating procedure, practice, or condition that may result in damage to equipment if not carefully observed or followed.

**Note**

An operating procedure, practice, or condition that requires emphasis.

**WORDING**

Word usage and intended meaning throughout this publication are as follows:

“Shall” indicates the application of a procedure is mandatory.

“Should” indicates the application of a procedure is recommended.

“May” and “need not” indicate the application of a procedure is optional.

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POC/(Command Representative)//
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3. PROPOSED NEW TEXT (Include classification)

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BT

Ensure that actual message conforms to MTF requirements.

Urgent Change Recommendation Message Format
ROUTINE CHANGE RECOMMENDATION TO (Publication Short Title, Revision/Edition, Change Number, Publication Long Title)

ENCL: (List Attached Tables, Figures, etc.)

1. The following changes are recommended for NTTP X-XX, Rev. X, Change X:
   a. CHANGE: (Page 1-1, Paragraph 1.1.1, Line 1)
      Replace “…the National Command Authority President and Secretary of Defense establishes procedures for the…”
      REASON: SECNAVINST ####, dated ####, instructing the term “National Command Authority” be replaced with “President and Secretary of Defense.”
   
   b. ADD: (Page 2-1, Paragraph 2.2, Line 4)
      Add sentence at end of paragraph “See Figure 2-1.”
      REASON: Sentence will refer reader to enclosed illustration.
      Add Figure 2-1 (see enclosure) where appropriate.
      REASON: Enclosed figure helps clarify text in Paragraph 2.2.
   
   c. DELETE: (Page 4-2, Paragraph 4.2.2, Line 3)
      Remove “Navy Tactical Support Activity.”
      “…Navy Tactical Support Activity, and the Navy Warfare Development Command are responsible for…”
      REASON: Activity has been deactivated.

2. Point of contact for this action is (name, grade or title, telephone, e-mail address).

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Routine Change Recommendation Letter Format
CHAPTER 1

Introduction

1.1 PURPOSE

The distances and poor communications common in early naval operations required decentralized decision making based on executing the commander’s intent. Even with advances in information and communication systems, decentralized execution by on-scene commanders based upon superior awareness of the situation remains a basic tenet of United States (U.S.) Navy operations.

Note

Throughout this publication, the term “commander” refers to a Navy component commander (NCC), numbered fleet commander (NFC), or joint force maritime component commander (JFMCC) who is operationally supported by a Maritime Operations Center (MOC). All other commanders have a preceding modifier to indicate what they command (e.g., combatant commander (CCDR), joint force commander (JFC), etc.).

MOCs have been established to address shortfalls in the U.S. Navy’s ability to command and control at the operational level of war. Through a top down effort to address these shortfalls, today’s Navy commanders at the operational level of war are better prepared to confront modern threats through the employment of trained and educated personnel, globally networked communications, and other common processes.

This Navy tactics, techniques, and procedures (NTTP) expands upon naval doctrine and complements existing joint doctrine. It provides guidance for the formation and functioning of a maritime operations center. It provides fundamentals and a generic template to organize the MOC to conduct operations in support of a NCC or NFC who may be designated as a JFC or joint/combined (or coalition) force maritime component commander. JP 3-33, Joint Task Force Headquarters, provides joint doctrine for when the commander is assigned as a joint force commander. In that case, the operations center will be called a joint operations center (JOC). The organizational template in this NTTP facilitates the execution processes that are internal to the MOC and those that involve external partners such as other MOCs, subordinate tactical commanders, higher headquarters (HHQ), and other components. It recognizes that variations between different MOCs are normal, and that the mission being executed influences the commander’s choice of organization and process requirements. This NTTP also recognizes that there are operations that are not warfare or combat operations but still require support at the operational level.

Note

The term “component” is used to indicate a level of command equivalent to either a Service component command or functional component command.

The MOC provides a framework within which Navy commanders at the operational-level exercise command and control (C2). The purpose of the MOC is to help the commander exercise control of his or her subordinate forces and to coordinate support from other component commanders. While the commander is invested with command authority, it is through the MOC that he or she exercises control. C2 entails both the processes (planning, directing, monitoring, and assessing) and systems (personnel, equipment, communications, facilities, and
procedures employed by the commander) to exercise authority over and provide guidance to assigned or attached forces. NWP 3-32, Maritime Operations at the Operational Level of War, delineates the C2 concepts associated with the MOC. This NTTP describes the organization and functions to support those operational concepts.

This publication addresses only the operational aspects of the MOC and does not describe fleet management. Although a goal of this NTTP is to establish commonality among MOCs, nothing in this NTTP should be interpreted as removing or altering the authority and responsibility of the commander to organize staff in a manner best suited to mission accomplishment. While this publication is intended to assist in organization and process standardization, it does not cover administrative control functions (also referred to as United States Code, Title 10, fleet management, or routine administrative responsibilities) but rather outlines the cross-functional, collaborative entities that help the commander perform at the operational level across the range of military operations (ROMO).

This NTTP may be used by NCCs, joint/combined (or coalition) force maritime component commanders (J/CFMCC) and numbered fleet commanders. Additionally, it is intended to be used in the development of instruction at appropriate military schools. It provides a basis for standardizing MOCs, as well as describing key responsibilities focused on the operational level of war. Accordingly, this publication is based on the following assumptions:

1. MOCs are established at all fleets and Navy component command headquarters (HQ) and form the nucleus of a JFMCC staff when designated.

2. If the commander is directed by HQ to stand up and command a joint task force (JTF), the MOC remains the basis for organization and process. Because JFC duties encompass a different span of control, it is advisable for the commander to focus the entire staff on those duties, delegating NCC/JFMCC duties to another commander or directing the staff to focus exclusively on being a JFC staff.

3. Command relationships (supporting/supported) with and between other Service forces will be determined by the JFC (i.e., the CCDR or the commander, joint task force (CJTF).

4. Commanders maintain operational control (OPCON) of assigned and attached Navy forces, unless directed to stand up as a JFC/JTF; in which case, those NCC and Service component duties the commander once held should be delegated to another commander.

5. MOCs perform the functions of monitoring, assessing, planning, directing, and communicating in support of the commander in the execution of assigned missions at the operational level.

6. Tactical planning and execution is conducted by commanders subordinate to the commander.

1.2 CONCEPT

The MOC’s goal is to provide an effective and efficient structure to support the commander’s decision cycle. The MOC is an extension of the commander; its function is to develop and implement the maritime elements of the combatant commander’s theater campaign plan, to plan and coordinate support from and for other component commanders, and to exercise control of forces for the commander. The span of control a commander can effectively exercise is finite. The operational-level commander delegates the authority to plan and execute tactical missions to subordinate task force (TF) or task group commanders. This enables the commander and the MOC to focus attention on the operational level and empowers subordinate commanders to employ their forces to support the commander’s intent.

The U.S. Navy’s heritage has inculcated an expectation of commanders to operate independently while following their superior commander’s intent to act when an opportunity presents itself, and to feel comfortable in conditions of ambiguity. These are attributes honed by mutual trust and confidence and years of experience at sea. This description of disciplined initiative is also known as mission command in joint doctrine. While this concept may be new to other Services, it is how the Navy has historically commanded. To ensure that planning does not stifle
mission command, the superior Navy commander and staff focus more on the purpose of operations rather than
the details of how subordinates will execute the tasks and avoid overly restrictive command and control concepts.
The commander’s intent cannot be a staff product; rather it must be a true embodiment of the commander’s vision
and the centerpiece of the commander’s discussions with subordinate commanders.

Commanders delegate decision-making authority to subordinates wherever possible to minimize detailed control
and empower subordinates initiative based on a thorough understanding of the commander’s intent and command
by negation rather than on constant communications. Using disciplined initiative, coupled with the tactical-level
composite warfare construct, enables coordinated, decentralized execution through multiple levels of command
from the numbered fleet to the platform level. Once missions and functions are assigned, the subordinate is
expected to take required actions without delay, keeping the superior commander informed of the situation. This
traditional naval approach to command supports the joint construct known as mission command. Mission
command is defined as “The conduct of military operations through decentralized execution based upon mission-
type orders” (JP 1-02). Prerequisites for mission command are the use of mission orders; a comprehensive
understanding of the mission, commander’s intent, and concept of operations (CONOPS); and mutual trust and
understanding between commanders and subordinates.

A MOC’s structure, organization, and staffing adapts to the mission assigned, the environment within which
operations will be conducted, the makeup of existing and potential adversaries or nature of the crisis (e.g., low
intensity conflict, major combat operations, defense support of civil authorities/foreign humanitarian assistance
(DSCA/FHA)), and the time available to reach the desired end state. The MOC is sourced by the traditional staff
personnel (N)-codes. Key billets within the MOC structure include the chief of staff (COS) and MOC director.
The COS is the key staff integrator who manages all staff processes and procedures, while the MOC director is
charged with running the MOC effectively based on the commander’s guidance. For a complete description
of COS and MOC director responsibilities, as well as other special supporting MOC roles, see appendix A.

To support the commander’s decision-making process and C2 functions, the MOC uses boards, bureaus, centers,
cells, and working groups, as well as elements, groups, offices, planning teams, and other coordinating bodies, to
support the commander’s decision cycle during all phases and across the full range of operations. Organizing the
MOC by using CFTs to plan, direct, monitor, and assess assigned missions will greatly speed the decision cycle.

Navy component commands will have similar organizational constructs but may require unique aspects to
conform to geographic or CCDR requirements. Use of a standard model facilitates coordination between MOCs,
coordination with other component commands, and reachback to supporting organizations. Other publications that
may assist the user in understanding a MOC organization and its functions can be found in the References Section
of this publication.

1.3 MARITIME OPERATIONS CENTER ORGANIZATION

There are three fundamental ways the MOC construct differs from the traditional N-codes staff structure and
processes:

1. Cross-function is overlaid on the traditional structure, creating a network of people, processes, and
functions.

2. These cross-functional boards, centers, and cells are managed via a battle rhythm (BR) that supports and
aligns with the commander’s decision cycle.

3. Primary operational functions are distinct from the administrative, support, and fleet management functions
of the staff; however, they coexist within the staff structure.

Figure 1-1 reveals how the MOC construct is different from the traditional, hierarchical Navy staff organization.
The commander’s leadership focuses every member of the staff. The traditional N-codes (at the bottom of the
figure) carry out fleet management responsibilities and supply the manpower, systems, information resources, and
expertise for the MOC. The commander’s decision cycle—monitor, assess, plan, direct and communicate—drives
MOC activities. All entities within the MOC exist to support the commander’s decision cycle. They can be
thought of as consisting of two layers. One layer, more persistent in nature, establishes, maintains, and shares knowledge and situational awareness (SA), and is organized into functional groups (intelligence (intel), logistics, combat systems, etc.). This layer may include predefined centers (e.g., fleet command center (FCC), logistics readiness center (LRC), maritime intelligence operations center (MIOC), and Communications and Information Systems Center/Navy Communication Systems Coordination Center (CISC/NCCC)) and usually have continuously manned watch floors. The other layer, whose components are stood up on an as-needed or as-required basis, is comprised of the other CFTs that are established to provide the cross-functional, collaborative work needed to support the commander and his battle rhythm. The requirements-based layer produces the mission-oriented output, whereas the permanent centers produce the functional, regional-specific information that feeds an operation. The specific internal relationships will be established by each headquarters and based on the mission. Eliminating bottlenecks and unnecessary chop chains is the key to keeping pace with the tempo of operations.

In a maritime headquarters, two complementary methods of organizing people and processes exist. The first is the traditional, vertical N-code structure which organizes people by the function they perform (i.e., intelligence, logistics). This classic hierarchical staff structure has served the Navy well in the past and will continue to do so but its stovepipes of knowledge and expertise do not facilitate the crosstalk needed to support a commander in a fast-paced military operation. The MOC can be thought of as a loosely bound network spanning across and overlaying the N-code structure. While the people are typically organized by N-code, certain processes are designated to take place in CFTs. Figure 1-2 illustrates the MOC organizational construct; more information on this topic can be found in appendix C.

The formalized addition of this cross-functional network to the traditional N-code organizational structure is what constitutes the MOC. MOC manning is sourced principally through the N-code organization but will do most of its work through the CFT construct. It must be recognized, however, that when a commander establishes a MOC, the traditional staff code organization does not disappear. The N-code directorates, shown in figure 1-1, are the foundation of the MOC. They supply the manpower, expertise, and facilities needed by the MOC to function.

Diverse mission sets assigned to the various MOCs compound the complexity of the observed MOC organization structures. Specifically, MOCs will have more than one line of operation or tasking. MOCs will typically plan in support of at least one major Operation Plan (OPLAN), planning regional engagement in support of the maritime portion of the CCDR’s theater campaign plan, and planning several contingency operations such as counterpiracy. While the structure presented here is not prescriptive, the attempt is to provide a template that the MOC may employ to organize in a common way to promote standardization for integration with joint commands and collaboration/coordination among the global network of MOCs and other component operations centers. Employment of common systems, processes, and organizations makes it easier to train and educate permanent MOC and augmentees.
Figure 1-1. Notional Navy Fleet/Component MOC Organization
Figure 1-2. MOC Organizational Construct
1.3.1 Commander, Chief of Staff, MOC Director, and Deputy MOC Director Roles

A Navy fleet commander is responsible for supporting both the U.S. Navy’s Title 10 requirements and Unified Command Plan (UCP) designated combatant command (CCMD) functional/joint operational missions. The fleet staff’s organizational construct directly reflects the priority the commander places on these missions.

The role of a COS is solidly established in joint doctrine as the key integrator of a joint staff. In accordance with JP 3-33, Joint Task Force Headquarters, the COS establishes and manages staff processes and procedures to support the commander’s decision-making process. This is supported within the MOC construct, as NWP 3-32 states that the commander normally delegates authority to the COS for the executive management of the entire staff. The COS directs staff tasks, conducts staff coordination, and ensures the staff is efficient and responsive.

The MOC construct establishes a MOC director position, entirely focused on ensuring the MOC is functioning as required to fulfill the commander’s assigned missions and operational tasks (OPTASKS). According to NWP 3-32, the MOC director is the lead officer for accomplishing all operational processes, directing maritime operations in accordance with commander’s guidance and reporting directly to the commander for operational mission issues. For more information on the COS and MOC director positions, see appendix A.

In addition to determining the roles of the COS and MOC director, an important challenge in effectively organizing the MOC is the establishment of streamlined, cohesive decision-making processes. To accomplish this, some commanders have chosen to dual-hat key positions; that is, one officer is assigned more than one role. While this practice is commonly used to more efficiently employ staff members, it can also be employed to mitigate key position manning shortfalls and capitalize on talent sets within the commander’s staff.

One example is the choice to dual-hat the intelligence director (N2) as the MOC deputy director. In this vein, seams between operations and intelligence are effectively mitigated in real time. The CFT construct provides for the comprehensive integration of operations and intelligence at the planner levels. The N2 serving as the MOC deputy director further reinforces this integration at the leadership level. Full-time leadership of the MIOC is then assumed by a senior officer within the N2, who remains focused on MIOC organization, production, and intelligence support to MOC efforts.

A few commanders have developed innovative ways to fill the three key positions of COS, MOC director, and N3, but most will choose to dual-hat two of the three roles into one leader. In the determination on the suitability of this option, commanders should weigh some common factors:

1. The degree of overlap between exercising C2 over operational missions and the routine functions of the commander’s staff tends to dictate how much the COS is involved in MOC operations. Where both missions have equal relative weight but involve different members of the staff, the COS and MOC director are occasionally given equal status an echelon below the commander, reporting directly to the commander in two separate and distinct roles. In some cases, the commander may choose to combine the COS and MOC director roles and designate a single person to fill them. This decision must be considered carefully, as the dual-hatted COS/MOC director may become saturated and unable to satisfactorily fill both roles during high-tempo operations and exercises.

2. NWP 3-32 states that the N3 (or N5) may be dual-hatted as the MOC director. Combining these roles is straightforward and logical, as the N3 directs the predominant MOC operations role and is heavily involved in the functions of planning, intelligence, logistics and sustainment, communications, assessment, and training. This practice is effective among fleet commanders, as it facilitates a natural way to adjudicate the third leadership position on the staff while preserving the COS’s ability to drive the headquarters’ decision-making processes.

1.3.2 A Cross-functional Approach to Staff Organization

Cross-functional collaboration is promoted by the formation of organizations that manage specific processes and accomplish tasks in support of mission accomplishment. These CFTs facilitate planning by the staff,
decisionmaking by the commander, and execution by subordinate forces. Inherently, CFTs are cross-functional in terms of their membership and their product development. However, oversight of the various CFTs can be viewed as being aligned with one of the staff codes. Another key feature of the MOC organization is that some of the functions will be performed by other elements of the headquarters staff. This NTTP, through the identification of the composition (skill sets, experience, background) of each CFT, helps to ensure that appropriately trained and experienced personnel are in place either on a full-time or part-time basis, as needed. Each individual staff member may serve more than one function simultaneously: the N-code to which the individual is permanently (traditionally) assigned and the one or more CFT of which he or she may be a functioning member. Figure 1-3 depicts a notional directorate/N-code CFT alignment. Leadership and staff members balance and prioritize fleet management and operational requirements in employing this cross-functional construct.
<table>
<thead>
<tr>
<th>Directorate</th>
<th>Functions</th>
</tr>
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| SPECIAL STAFF | KIM BOARD  
KIM WORKING GROUP  
FLEET SURGEON: HSS CELL |
| MANPOWER, PERSONNEL, AND ADMINISTRATIVE DIRECTORATE (N1) | ADMIN PERS CELL |
| INTELLIGENCE DIRECTORATE (N2) | MARITIME INTELLIGENCE OPERATIONS CENTER  
INTELLIGENCE PLANS/INTELLIGENCE PREPARATION OF THE OPERATIONAL ENVIRONMENT (IPOE)  
INTELLIGENCE OPERATIONS  
COUNTERINTELLIGENCE (CI)/HUMAN INTELLIGENCE (HUMINT)  
INTELLIGENCE SUPPORT ELEMENT  
COLLECTION MANAGEMENT BOARD |
| OPERATIONS DIRECTORATE (N3) | FLEET COMMAND CENTER  
COPS CELL  
FOPS CELL  
OPTS  
FIRES ELEMENT  
IAMD CELL  
IO CELL  
METOC CELL  
ROE/RUF WORKING GROUP  
PROTECTION WORKING GROUP  
C2 OF C2 WORKING GROUP  
SPACE SUPPORT WG  
MARITIME AIR OPERATIONS CELL |
| LOGISTICS DIRECTORATE (N4) | LOGISTICS READINESS CENTER  
LOGISTICS PLANS CELL  
SUSTAINMENT AND SERVICES CELL  
READINESS CELL |
| PLANS DIRECTORATE (N5) | MARITIME PLANNING GROUP  
JOPES CELL  
RED CELL  
MARITIME ASSESSMENT GROUP  
FUPLANS |
| COMMUNICATIONS AND INFORMATION SYSTEMS DIRECTORATE (N6) | COMMUNICATIONS AND INFORMATION SYSTEMS CENTER  
COPS CELL  
CS PLANS CELL  
CS MOC/HQ SUPPORT CELL  
CYBERDEFENSE CELL |

Figure 1-3. Notional Directorate—MOC CFT Alignment
1.3.3 Boards, Bureaus, Centers, Cells, Elements, Groups, Offices, Planning Teams, and Working Groups

As a practical matter, the commander establishes and maintains only those CFTs that enhance planning and decisionmaking within the HQ. The commander establishes, modifies, and dissolves these functional entities as the needs of the command evolve. The fact that MOCs may be planning and executing more than one operation at a time complicates orchestration of the proper mix of CFTs. Definitions of common CFTs follow:

1. Board. An organized group of individuals within a joint force commander’s headquarters, appointed by the commander (or other authority), that meets with the purpose of gaining guidance or decision. Its responsibilities and authority are governed by the authority which established the board (JP 1-02. Source: JP 3-33). Boards are chaired by a senior leader with members representing major staff elements, subordinate commands, liaison officers (LNOs), and other organizations as required. There are two different types of boards:

   a. Command Board. A command board is chaired by the commander, and its purpose is to gain guidance or decision from the commander (JP 3-33).

   b. Functional Board. A board whose purpose is to gain functionally specific guidance and decisions from the commander (or designated representative) based on a staff recommendation. These boards often focus on:

      (1) Synchronizing a particular function (e.g., IO, targeting, collection, and distribution) across multiple planning initiatives

      (2) Allocating resources between ongoing or future operations

      (3) Maintaining continuity of purpose across ongoing operations (JP 3-33).


3. Cell. A subordinate organization formed around a specific process, capability, or activity within a designated larger organization of a headquarters. A cell usually is part of both a functional and a traditional staff structure (JP 1-02. Source: JP 3-33).

4. Center. An enduring functional organization, with a supporting staff, designed to perform a joint function within a joint force commander’s headquarters (JP 1-02. Source: JP 3-33). Often, these organizations have designated locations or facilities.


7. Office. An enduring organization that is formed around a specific function within a joint force commander’s headquarters to coordinate and manage support requirements (JP 1-02. Source: JP 3-33).

8. Planning Team. A functional element within a joint force commander’s headquarters established to solve problems related to a specific task or requirement. The planning team is not enduring and dissolves upon completion of the assigned task (JP 1-02. Source: JP 3-33).
9. Working Group. An enduring or ad hoc organization within a joint force commander’s headquarters formed around a specific function whose purpose is to provide analysis to users. The working group consists of a core functional group and other staff and component representatives (JP 1-02. Source: JP 3-33). Planning teams and working groups are complementary. Working groups enhance planning through their provision of functional staff estimates to multiple planning teams. In contrast, planning teams integrate the functional concepts of multiple functional WGs into plans and orders.

Organizing the MOC according to the CFT construct greatly facilitates planning and decisionmaking by aligning with staff structures employed by other joint and Service commanders. Each CFT should have a headquarters assistant chief of staff (ACOS)/director assigned for the purpose of oversight.

Chapters 2 through 7 in this publication introduce, define, and list the composition, points of coordination, inputs, and outputs of several of the CFTs that are most widely employed within the MOCs. The CFTs introduced in this publication should not be construed as all-inclusive. The introductions of the various CFTs are organized by their notional ACOS/director oversight as indicated in figure 1-3.

Changing or emerging requirements may require the design and addition of CFTs to better support the commander. The development of these new organizations can use the method of defining functions, composition, points of coordination, inputs, or outputs in this publication as a template to clearly define and communicate the function of the changed or new CFT. The phases “as required” or “as directed” are used in the Function, Composition, Point of Coordination, Inputs or Outputs subsections of chapters 2 through 7 to indicate that the exact requirement should be tailored to meet the needs of the commander or unique situation.

1.3.4 Liaison

Liaison officers facilitate communications between elements of military forces and other organizations to ensure mutual understanding and unity of purpose and action. Liaison is the most commonly employed technique to establish and maintain close, continuous, physical communications between commands. LNOs may be exchanged between higher, lower, or adjacent organizations.

Liaison officers are the personal and official representatives of the sending organization’s commander and should be authorized direct face-to-face liaison with the MOC commander. As such, LNOs require the special confidence of the sending organization’s commander and the MOC commander. They are not staff augmentees or watch officers and are not full-time planners. LNOs must retain the flexibility and freedom of action required to perform the broader functions tasked by the sending organization’s commander.

Liaison officer requirements are based on the established command relationships and on anticipated mission support requirements. Liaison officers to the MOC should be of sufficient rank to influence the decision-making process. Because timing for dispatch of LNOs is generally a sending commander’s decision, the receiving organization must communicate any limitations or special requirements early so as to preclude potential problems. Early LNO or LNO team effectiveness results from a well-planned reception and rapid integration into the receiving staff.

LNOs are not a substitute for transmitting critical information through normal command and control channels. Likewise, LNOs are not a replacement for proper staff-to-staff coordination. The LNO and receiving headquarters should understand the limits of the LNO’s authority. This authority is best specified in writing.

LNOs perform several critical functions that are consistent across the full range of military operations. The extent to which these functions are performed depends on the mission as well as the charter established by the sending organization commander. The LNO has four basic functions: monitor, coordinate, advise, and assist.

1. Monitor. The LNO must monitor the operations of the receiving and sending organizations and understand how each affects the other.
2. Coordinate. LNOs help synchronize current operations and future planning between sending and receiving organizations.

3. Advise. The LNO is the resident expert on the sending command’s capabilities and limitations. The LNO must be able to advise the commander and MOC on the optimum use of the command he or she represents.

4. Assist. The LNO must assist on two levels. First, the LNO must act as the conduit between the sending and receiving commands. Second, by integrating into the MOC and attending various boards, meetings, and planning sessions, the LNO can ensure that those groups make informed decisions.

The commander must manage significant liaison requirements both to and from the MOC. These requirements may include but are not limited to the following:

1. To the combatant commander or subordinate commanders
2. To/from supporting commands
3. To/from a Department of Defense agency or other Federal agencies (e.g., United States Agency for International Development.)
4. To a U.S. embassy/consulate
5. To/from foreign military organizations.

Note

Foreign disclosure requirements for multinational LNOs must be considered to ensure proper access to information and systems that facilitate coordination. Operations within the MOC must be open and accessible to support mission requirements. The MOC leadership must make every effort to gain foreign disclosure approval for foreign liaison personnel for efficient and effective operations that promote mutual understanding and cooperation.

6. To/from JTF components or major subordinate commands.

For further information on LNO integration, see appendix B.

1.3.5 Seven-minute Drill

A continuing challenge for commanders when defining the MOC CFT structure is balancing the potentially large number of CFTs desired for full staff analysis and integration with the limited number of personnel on the staff, time available, and other competing scheduling requirements for the principals and leaders. It is the responsibility of N-code directors to assess mission requirements and propose appropriate CFTs for the MOC organization.

Battle rhythm is one means to control critical resources of time, information, and decision makers within the MOC. The more unnecessary CFTs are stood up, the more resources are tied up. In order to force discipline on the numbers of CFTs, the CFT staff proponent is required to defend its need in terms of what it brings to the decision cycle (e.g., specific inputs, outputs, and recipients of that information). The seven-minute drill, outlined in figure 1-4, is a tool to vet CFTs. The seven-minute drill is a way the staff proponent summarizes the purpose for the appropriate CFT, its linkage to other CFTs, and its support to decision-making requirements. Seven-minute drills should be reviewed whenever the MOC director feels that the change in mission requires a change in the composition of CFT, either separately or through an existing group such as the MPG.

The questions outlined in figure 1-4 should be used when constructing a seven-minute drill. The proper method for constructing this drill is to have the appropriate CFT lead and defend the CFT within the battle rhythm to other action officers. These leads will be most familiar with the battle rhythm and can challenge the proposed CFT if it has flaws (i.e., it is being held at a time when no one can attend, the output is purposeless or redundant). The seven-minute drill process should involve as many members of the MOC as feasible to allow for a broad review.
of the proposed CFT. The MOC director and/or COS may require a battle rhythm rehearsal in order to validate the value each CFT adds to the commander’s decision cycle.

1.4 COMMANDER’S DECISION CYCLE

The commander’s decision cycle is a process that depicts how command and staff elements determine required actions, codify them in directives, execute them, and monitor results. The commander’s decision cycle has four phases and an integrating element:

1. Monitor: Monitoring involves measuring ongoing activities that may impact the operational area or impact ongoing or future operations. The baseline for this measurement of the situation is the current plan or plans. This baseline allows the staff to measure the current situation against the one envisioned in the plan, and the commander and staff to identify where the current situation deviates from the one envisioned in the plan. Although staff sections monitor their individual staff functions to maintain current staff estimates, the preponderance of monitoring is conducted by the MIOC, the FCC, the LRC, and the CIS center.

2. Assess: Within the commander’s decision cycle, assessment is the determination of the impact of events as they relate to overall mission accomplishment. Fundamental to assessment are judgments about progress in designated mission areas as measured against the expected progress in those same mission areas. These judgments allow the commander and the staff to determine where adjustments must be made to operations and serve as a catalyst for planning. Ultimately, assessment allows the commander and staff to keep pace with a constantly evolving situation while staying focused on mission accomplishment. The maritime assessment group has formal responsibility for assessment, but all MOC organizational entities bear some level of responsibility to be alert to indications that things are not going according to plan and take appropriate action.

<table>
<thead>
<tr>
<th>Seven-minute Drill</th>
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</thead>
<tbody>
<tr>
<td>1. Name of board or cell:</td>
</tr>
<tr>
<td>2. Lead J/N-code</td>
</tr>
<tr>
<td>3. When/where does it meet in battle rhythm?</td>
</tr>
<tr>
<td>4. Purpose:</td>
</tr>
<tr>
<td>5. Inputs required from:</td>
</tr>
<tr>
<td>6. When?</td>
</tr>
<tr>
<td>7. Output/Process/Product:</td>
</tr>
<tr>
<td>8. Time of delivery:</td>
</tr>
<tr>
<td>9. Membership codes:</td>
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</tbody>
</table>

Figure 1-4. Seven-minute Drill
3. Plan: In the planning portion of the commander’s decision cycle, the commander and staff make adjustments to the current plan or develop new plans with the purpose of successful completion of the broader mission. The preponderance of the planning function is conducted in either future operations or future plans.

4. Direct: The commander, through the MOC, directs actions to ensure that current orders and directives are completed as intended. This direction is done with the broader purpose of achieving the overall mission. Tools such as the commander’s intent and commander’s critical information requirements (CCIRs) assist the MOC in this role. The preponderance of the directing function is conducted by FCC and COPS.

5. Communicate: Within the commander’s decision cycle, the communicate element is the integration aspect of the four phases. Critical to a commander’s success is the ability to effectively communicate up and down the chain of command and across multiple echelons, even in a denied or degraded C2 environment. While a natural chronological flow exists in the decision cycle, it is important to emphasize that at any instance in time, all these functions are typically being performed concurrently (and using different time horizons); outputs from any of the phases have potential to have time-critical importance to one or more of the other phases. This critical information flow is shown in figure 1-5. Note that communicate does not refer to any system, application, or network. Rather, it refers to the need for information and knowledge to flow through an organization in a timely and relevant manner.

For the commander to move from being reactive to seizing the initiative, the decision cycle must be appropriate and timely with that of the operation. The timeliness of the commander’s decisionmaking is a key component of mission success. This is the conceptual framework in which the commander’s battle rhythm should be managed.

1.5 GENERAL APPROACH TO COMMAND AND CONTROL

Maritime component commanders may elect to use mission command when the adversary may prevent close coordination with subordinate tactical commanders. Mission command is defined as “the conduct of military operations through decentralized execution based upon mission-type orders” (JP 1-02). Prerequisites for mission command are the use of mission orders; a comprehensive understanding of the mission, commander’s intent, and concept of operations; and mutual trust and understanding between commanders and subordinates. Command and control of maritime forces is shaped by the characteristics and complexity of the maritime domain and the traditions and independent culture of maritime forces.
The key tenets to C2 philosophy that have remained unchanged are the necessity of the subordinate commanders to execute operations independently but in accordance with a thorough understanding of the commander’s intent and command by negation. Once missions and functions are assigned, the subordinate is expected to take required actions without delay, keeping the superior commander informed of the situation. The superior commander retains the authority to negate any particular action. Joint maritime operations tend to be decentralized. Successful mission command demands that subordinate leaders at all echelons exercise disciplined initiative and act aggressively and independently to accomplish the mission. Essential to mission command is the thorough understanding of the commander’s intent at every level of command. Commanders issue mission-type orders focused on the purpose of the operation rather than on the details of how to perform assigned tasks. They delegate decisions to subordinates wherever possible to minimize detailed control and empower subordinates’ initiative to make decisions based on understanding the commander’s intent rather than on constant communications. When maritime operations are decentralized and reliant on mission command, coordination and planning considerations should include the procedures, measures, and resources (including time) required to implement those plans.

See appendix D for additional information on assured command and control in a denied or degraded environment.

1.6 COMMANDER’S BATTLE RHYTHM

The entire operation of the MOC is driven by the commander’s battle rhythm, which is the deliberate daily cycle of command, staff, and unit activities intended to synchronize current and future operations. A commander’s BR regulates the speed, flow, and sharing of information that support the commander’s decision cycle; furthermore, BR is a cascading process. As a practical matter, the commander’s BR consists of a series of meetings, report requirements, and other activities. It must be designed to minimize the time the commander and key staff members spend attending meetings and listening to briefings; it must allow the staff and subordinate commanders time to plan, communicate with the commander, and direct the activities of their subordinates. Within the CFT concept, many of the WG events produce products that serve as input to subsequent collaboration events. To ensure the timeliness of prerequisite products and to build on the dynamic nature of the monitor–assess–plan–
direct decision cycle, a definitive and reliable tempo must be set early in any operational endeavor. The means of setting that tempo is referred to as battle rhythm. Establishment of an appropriate BR can be an iterative process. A BR schedule is developed based on when decision makers need to have certain pieces of information before they enter into high-level collaboration or decision events. Often, BR schedules are developed by identifying the critical events, the requisite information inputs and the products that are outcomes of those events, and then sequencing them efficiently. Additionally, BR schedules must be aligned with senior and subordinate battle rhythms. Adherence to scheduled BR events is critical to ensure the requisite information or necessary expertise is gathered together at the appropriate time. Typically, the knowledge management officer (KMO) has the planning lead for development of the initial draft BR with input from the CFT leads and synchronization considerations with higher headquarters staff.

1.7 MANAGING THE BATTLE RHYTHM

The BR is not static; as the operational environment fluctuates and variables are introduced into a situation, the BR may change as well. It is important to have seven-minute drills for every event that is reflected on the BR. These drills provide information to individuals about what events they need to participate in, the purpose of the event, and the inputs/outputs of the event. Once the BR is approved, it is important that one individual assumes ownership of the BR (typically, this is the COS) and that the process by which a request to change a BR is submitted/approved is well understood across the staff. Change requests need to be vetted to assess information flow issues, deconflict event facilities, and ensure proper notification of BR changes across the relevant elements of the entire force. Frequently, the KMO leads these vetting and deconfliction issues related to changing the BR and makes recommendations to the COS regarding approval/disapproval/modification of the request. Finally, ensuring that all participants are aware of which version of the BR is currently in effect is a crucial BR management requirement. See figures 1-6 and 1-7 for notional BR schematics.
Figure 1-6. Notional Battle Rhythm for a C/JFMCC

- Release C/JFMCC Intentions Msg
- Watch Turnover
- C/JFMCC Targeting Guidance to CTFs
  - Review 24–72 hrs targets
  - Refine 72–96 hrs target
  - Receive future targeting guidance
- FOPS Brief C/JFMCC and Draft Intentions Msg
- C/JFMCC SITREP and JPERSTAT Due
- C/JFMCC Daily VTC w/CTFs
- FOPS, MPG
  - Refine 96–120 hrs concepts Based on CJTF guidance
  - Refine 96–120 hrs targeting
- Update 96–120 hr ops, Key Decisions, CCIR, and deep ops
  - Receive CJTF guidance
- CJTF VTC
  - Develop 96–120 hrs concepts Based on CJTF guidance
  - Refine 96–120 hrs targeting
1.8 ASSURED C2 IN ANTI-ACCESS (A2)/AREA DENIAL (AD) ENVIRONMENT

The challenges associated with the increase of complexity to our C2 systems are exasperated in today’s complex and disparate C2 environment by our reliance on ad hoc processes to deal with uncertainty in or to detect loss of or degradation to communications and other C2 systems. Couple this with no purposeful/deliberate approach to fully understanding the operational impact these uncertainties and degradations will have on operations, and operational risk escalates.

C2 is enabled by intelligence and information sensors, data and analysis (i.e., N2/MIOC outputs); networks and communication transport (i.e., N6/NCCC systems management); and decision support (i.e., N3/DFC, COP, and information management (IM)). The physical and cyber protection of these capabilities is also critical and requires deliberate attention. Assured C2 in A2/AD environments will require deliberate actions and processes throughout the MOC with constant coordination and collaboration between the N2, N3, N39 (Information Operations), and N6 activities. More detailed discussion on this subject can be found in Appendix D, tactical memorandum 3-23.3-12 Command and Control of Command and Control, and the TM 3-56.1-12, Command and Control in a Denied or Degraded Environment.

1.9 MARITIME DOMAIN AWARENESS

The fusion of maritime intelligence and maritime situational awareness forms maritime domain awareness (MDA) for which Navy is executive agent within the Department of Defense. MDA is the effective understanding of anything associated with the global maritime domain that could impact the security, safety, economy, or environment of a nation (JP 3-32). While MDA involves strategic through tactical levels of commands, the Navy
MDA process is centered at numbered fleet and Navy component command MOCs working with the Navy regional operations centers (ROCs) and reaching back to the Office of Naval Intelligence and fleet information operations centers (FIOCs). This process provides operational-level commanders with maritime domain data, information, and intelligence to facilitate their decisionmaking. Specifically, within the MOC, the responsibility for establishing and maintaining maritime domain awareness lies with the fleet command center (see section 3.3). Resources for further information on MDA are primarily contained in the Navy MDA Concept, fleet MDA CONOPS, and the Navy MDA TM 3-32.1-10, Maritime Domain Awareness.
CHAPTER 2

Intelligence

2.1 GENERAL

The commander exercises his or her individual accountability for unity of intelligence efforts through the senior intelligence officer (SIO) and by personnel assigned to the intelligence department. The senior intelligence officer (SIO) normally is designated as the ACOS for intelligence and carries an N2 staff code. The senior signals intelligence (SIGINT) officer also will be assigned as the assistant intelligence officer. This officer is the staff lead for SIGINT operations in support of the commander and as set forth by the SIO. The senior SIGINT officer is charged with leveraging organic and nonorganic SIGINT resources and capabilities for integration into the broader intelligence mechanism. The senior SIGINT officer serves as the special advisor to the SIO in order to integrate signals intelligence into the full spectrum of intelligence operations.

Intelligence support to the MOC is directed by the SIO. This support is organized through two primary mechanisms: the MIOC and the ISE. The MIOC and the ISE are highlighted in figure 2-1. This figure shows the context for MOC intelligence support activities which help to establish, maintain, and share situational awareness in support of the commander’s battle rhythm. The use of N2 staff to operate the MIOC and ISE forms a network of people, processes, and functions which are:

1. Managed via a BR that aligns with the commander’s decision cycle
2. Separated organizationally from the administrative, support, and fleet management functions of the staff.

MIOC and ISE responsibilities are discussed in sections 2.1.1 and 2.1.2. Intelligence responsibilities are comprised of functions categorized in the general areas of intelligence plans, intelligence preparation of the operational environment, intelligence operations and counterintelligence/human intelligence. These areas of intelligence support are discussed beginning in section 2.2.

2.1.1 Maritime Intelligence Operations Center

The MIOC is a 24 hours-per-day/7 days-per-week (24/7) operation responsible for attaining, maintaining, and sharing intelligence-related situational awareness. The MIOC is an all-source intelligence organization whose operations and schedule are driven by the needs of the commander and the established MOC battle rhythm. Its primary function is to satisfy the commander and staff’s requirements by planning, conducting, collecting, analyzing, and disseminating reliable and timely intelligence. These actions are centered on adversary capabilities, indications and warnings (I&W), IO, targeting, and assessment. Intelligence must perform as an operational element in the monitor-assess-plan-direct processes. While intelligence is an operational function in and of itself, it also has a supporting role in the planning and execution for all other operational functions. The MIOC I&W watch feeds continuous adversary situation reporting and predictive analysis into the COP. The watch relays intelligence to the staff and conveys staff requirements back to the MIOC.

The MIOC organization and location differ at each command and vary between operations but should be organized to conduct multiple simultaneous operations as required. Figure 2-2 depicts a notional MIOC organizational construct. This diagram is not prescriptive but depicts the most common subelements contained within MIOCs and can be tailored by MOCs individually as needed for mission needs. Successful MIOC operations are a byproduct of planning that takes into account the ever-present conflict between the need to protect the most critical intelligence sources and the need to share the information acquired as broadly and rapidly as possible.
as possible. Locating the I&W watch in the FCC is considered the best practice but, when that is not possible, there will be a greater requirement on watch standers to achieve the necessary level of information exchange. The I&W watch can operate in nonsensitive compartmented information facility spaces in missions at lower ends of the conflict scale, such as foreign humanitarian assistance and civil support. However, as operations move up the scale of conflict, commanders assume rapidly increasing risk of disclosure if the intelligence watch functions remain in general service spaces. Understanding this risk and building an architecture where risk is balanced with other operational requirements is a key element in planning.

Subject matter experts (SME) in the MIOC also provide the commander and subordinate commands with current and operational intelligence support. Tailored intelligence support is provided to units assigned to the commander to ensure all share a common understanding of the threats.

Figure 2-1. Notional MOC with Intelligence-related CFTs Highlighted
The MIOC responsibilities include:

1. Provide I&W, including the receipt, processing, initial analysis, and rapid dissemination of time-sensitive intelligence.1

2. Serve as the commander’s COP database manager for red and white tracks.

3. Conduct, maintain, and update IPOE as necessary throughout an event or campaign.

4. Ensure the various intelligence sensors and architectures are aligned and optimized with current operations.

5. In conjunction with the KMO, build and maintain an intelligence information and knowledge management (KM) effort that enables all intelligence users to be able to locate intelligence information as rapidly as possible.

6. Monitor the intelligence architecture and its systems health and status by all means available.

7. Maintain an intelligence request for information (RFI) process that conforms to theater standards. Ensure that requestors not only know that their request is being worked but know what is being done to satisfy it and when they can expect it to be satisfied.

8. Support CFT intelligence efforts, with special emphasis on intelligence-intensive processes such as assessment, fires, and information operations.

9. Man and support the intelligence functions of the FCC intelligence, surveillance, and reconnaissance (ISR) operations team. Within the MOC, ISR is a combined intelligence (collection management staff) and operations (COPS ISR OPS) effort. Maintain SA of the position and availability of maritime forces to support short-notice ISR sorties.

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1 Indications and warnings intelligence concerns foreign developments that could involve a threat to the United States, U.S. or allied military forces, U.S. political or economic interests, or to U.S. citizens abroad. Indications and warnings is very time-sensitive. It includes forewarning of adversary actions or intentions; the imminence of nuclear or nonnuclear attack on the United States, its overseas forces, or allied nations; hostile reactions to U.S. activities; terrorist attacks; and other similar events. (JP 2-0, Joint Intelligence)
10. Notify the battle watch captain (BWC) upon receipt of any intelligence that addresses the satisfaction of a CCIR with special emphasis on priority intelligence requirements (PIRs).

11. Create an intelligence dissemination plan that optimizes the communications capabilities of receiving commands.

12. Report any degradation to the intelligence architecture that will impact operations to the BWC.

13. Assess the adequacy of the intelligence effort.

14. Support exercise efforts within the MOC as required by injecting realism into scenarios and conducting exercise warm starts.

The MIOC maintains elements that provide support to both cells within the MIOC as well as to staff members and functions throughout the MOC organization such as the special security functions and foreign disclosure functions. Military information is a national security asset that must be protected and that may be shared with foreign representatives only when there is a clearly defined advantage to the United States. Only designated foreign disclosure officers (FDOs) may approve the disclosure or release of classified and controlled unclassified military information to foreign representatives.

2.1.2 Intelligence Support Element

The ISE is a construct derived from joint doctrine that organizes several core intelligence functions into a coherent process. While the MIOC is the organization that fulfills the commander’s numbered fleet theater responsibilities, an ISE can be established to support the commander’s responsibilities if designated as a JFMCC. In this case, the MIOC continues to support the commander’s statutory numbered fleet responsibilities while the ISE serves the commander in his JFMCC role. The ISE gives the commander liaison with the JTF commander’s JISE and a focus on the joint operations area (JOA) and campaign requirements. The ISE consists of an ISE officer who is responsible to the SIO for the direction and synchronization of an I&W watch; a collection management office (which may be stood up as either a working group, board, or cell in some operations); a production and analysis office; an ISR tasking, collection, processing, exploitation, and dissemination (TCPED) cell; and an interagency/coalition/host nation (HN) group. Intelligence support element TCPED cell and interagency/coalition/HN groups are options that may assist the commander, depending on the role and mission assigned.

The ISE responsibilities include:

1. Provide fleet I&W, including the receipt, processing, initial analysis, and rapid dissemination of time sensitive intelligence.

2. Serve as the commander’s COP database manager for red and white tracks.

3. With support from the collection manager, man and manage intelligence aspects of the FCC/JOC ISR operations team, which is responsible for monitoring collection operations and retasking of the commander’s ISR assets in a dynamic operational environment.

4. Prepare and deliver briefings, as required, in support of COPS and the battle watch.

5. Execute the intelligence dissemination plan on a 24/7 basis, including dissemination of intelligence to internal staff; higher, adjacent, and subordinate commands; component commands; and activities supporting the commander, as required. Include periodic intelligence reports, spot reports, critics, and other I&W products.

6. Produce and disseminate a current theater intelligence point of contact (POC) list, with phone numbers and e-mail addresses (e.g., Joint Worldwide Intelligence Communications System (JWICS), SECRET Internet
Protocol Router Network, and Non-Secure Internet Protocol Router Network), including listings of commander, ESG, carrier strike group (CSG), theater antisubmarine warfare commander (TASWC), and other force intelligence POCs.

7. Establish a federated I&W architecture (e.g., collaboration/chat rooms with appropriate business rules) between maritime commander intelligence assets that are fully integrated with the JFC/CJTF I&W architecture.

2.2 INTELLIGENCE PLANS

N2 department staff is the critical link between the MIOC and the intelligence planning function. This staff ensures that intelligence is fully integrated into regional security engagement and planning efforts conducted by the MPG. See section 5.3 for a description of maritime planning activities. Intelligence requirements in the context of planning have two elements: (1) integrating the commander’s intelligence requirements and collection plans with theater and national intelligence requirements and collection plans and (2) the use of the planning process to develop plans that will help satisfy the commander’s intelligence needs.

As new missions are assigned or operations escalate, the MIOC staff will align intelligence resources with the needs of the planning effort. IPOE and Red Cell analysis become the primary planning enablers of intelligence support to the planning process. Planning for targeting functions will be supported by providing the full range of target database lists and target materials necessary for achieving effects identified in the planning process while also supporting the assessment process. Personnel may be redirected to IPOE and Red Cell as new missions are assigned or operations increase. Targeting efforts may be redirected at future effects-based operations rather than baseline collection.

The MIOC staff develops and prioritizes mission-essential information (MEI) exchanges required to accomplish the mission and meet the commander’s intent. These exchanges must define who exchanges what information with whom, why the information is necessary, and in what manner the exchange takes place. The MOC staff works with the N6 planners to determine the network and communication transport requirements necessary to support these exchanges. Well defined and prioritized MEIs are necessary to ensure preplanned responses (PPRs) to disconnected, interrupted, low-bandwidth (DIL) events continue to move the plan forward.

Intelligence plans function as the focal point for coordination of intelligence support to contingency and crisis action planning (CAP). Personnel assigned are the primary candidates to fill intelligence positions on whatever future planning and future operations organizations are established in the command.

MIOC targeting includes all targeting capabilities necessary to identify, develop, analyze, prioritize, and nominate targets in support of HHQ’s and the commander’s objectives, as well as to assess kinetic and nonkinetic target prosecution. Support to the MOC fires element (FE) and targeting is primarily achieved through target development and nomination, coordination, deconfliction, and combat assessment (CA) for both deliberate and dynamic targeting. See section 3.7 for additional information on targeting organization and processes within the MOC.

2.2.1 Intelligence Planning Functions

1. Produce the intelligence annex (Annex B) to OPLANs, operation orders (OPORD) or supplementary plans. Coordinate with MIOC cells for input into the appropriate Annex B sections (for example: exploitation, production, analysis, and dissemination (EPAD) should provide input on the threat assessment portion of Annex B).

2. Draft PIR submission for SIO review.

3. Provide intelligence input to planning support tools such as a synchronization matrix.

4. Collect and maintain a master intelligence requirements list to support planning.
5. Ensure the SIO is notified whenever intelligence requirements with low likelihood of satisfaction are submitted.

6. Assess and report the impact of degradation, losses, intrusion, and/or denial of intelligence capability and how it effects current operations and plans to the BWC. Recommend mitigation courses of action (COA) and provide the estimated duration of impacts to BWC and other N3/N6 watch standers.

7. Ensure IPOE activities are informed by planning requirements and vice versa.

8. Execute and manage the commander’s portion of the federated targeting plan in coordination with the MOC fires element.

9. Plan and coordinate targeting aspects of OPLANs, concept plans (CONPLANs), and special projects with the MOC fires element.

10. Manage and coordinate target-related information exchange among assigned assets, other component targeting cells, theater joint intelligence operations center (JIOC), and federated partners to facilitate effective and timely flow of federated target development.

11. Provide assigned assets with specific targeting guidance and procedures.

12. Conduct target research, target system analysis, aimpoint recommendations, target material production, target database management, collateral damage estimates, weaponing recommendations, and precision coordinate mensuration, as required, in support of maritime missions, tasks, and objectives.

13. Receive and exploit national, theater, and organic imagery in support of deliberate and dynamic targeting requirements.

14. In coordination with the MOC fires element, conduct target validation, including law of armed conflict (LOAC) and ROE considerations, as well as vetting of nominated targets, against the no-strike list (NSL) and restricted target list (RTL).

15. In support of the MOC fires element, generate target development nominations (TDNs) for addition of new targets to joint target list (JTL).

16. In support of the MOC fires element, develop deconflicted and prioritized target nomination lists with subordinate tactical commands: maritime prioritized target list (MPTL) for maritime organic missions and maritime target nomination list (MTNL) for targets requiring joint mission support and inclusion on the joint integrated prioritized target list (JIPTL).

17. Nominate targets to RTL and NSL.

18. In support of the MOC fires element, nominate targets to JFC’s time-sensitive target (TST) list.

19. In support of the MOC fires element, develop and maintain list of high-payoff targets (HPTs).

20. In support of the MOC fires element, nominate selected HPTs for the JFMCC’s maritime dynamic targeting (MDT) list.

21. Generate and coordinate intelligence collection requirements (CRs) in support of deliberate and dynamic targeting.

22. Access, display, and update targeting data within joint COP and modernized integrated database (MIDB).

23. Participate collaboratively in the JFC targeting process.
24. Attend appropriate HHQ targeting coordination meetings to coordinate and articulate the commander’s target prioritization, issues, and concerns.

25. Submit target development and production requirements to theater JIOC and/or federated partners, as required.

26. Provide personnel and expertise to CFT organizations, as required.

2.2.2 Composition

As assigned.

2.2.3 Points of Coordination

1. Internal:
   a. Red Cell
   b. Maritime planning group
   c. Future operations
   d. FUPLANS/MPG/OPTs
   e. Maritime assessment group
   f. Information operations cell
   g. Knowledge and information management WG
   h. LRC
   i. Fires element
   j. Maritime air operations cell.

2. External:
   a. Joint force commander JISE
   b. Theater JIOC
   c. National intelligence organizations
   d. Subordinate commander staff intelligence organizations
   e. Other components.

2.2.4 Inputs

1. Theater campaign plan
2. Theater security cooperation plan
3. Other, as required.
2.2.5 Outputs

1. Annex B, Intelligence, to OPLANs/OPORDs

2. Master list of intelligence requirements to support planning.

2.3 INTELLIGENCE PREPARATION OF THE OPERATIONAL ENVIRONMENT

Conducting IPOE is a MIOC responsibility. IPOE is the analytical process to produce intelligence assessments, estimates, and other intelligence products. The primary purpose of IPOE is to support the commander’s decisionmaking and planning by identifying, assessing, and estimating the enemy’s centers of gravity, critical factors, critical capabilities, critical strengths, critical weaknesses, critical vulnerabilities, objectives, decisive points, and courses of action most likely, and most dangerous, to be encountered based on the situation. The intelligence center uses the IPOE process to manage the analysis and development of products that provide a systems-based understanding of the increasingly complex and interconnected operational environment. The composite of these conditions, circumstances, and influences affect the employment of capabilities and influence the decisions of the commander. MIOC efforts can be complicated by limitations imposed on or by the JFC if force is to be used indirectly, such as coercing a decision from the enemy or producing catalysis—looking for second- or third-order effects.

IPOE creates a shared understanding of the operational environment for all the staff’s elements. Focus of effort will vary based on the MOC’s role or mission but, in all cases, the MIOC IPOE effort needs to be tied to the JFC’s joint intelligence preparation of the operational environment (JIPOE), both as an input and output. This process must also support the JFMCC/NCC role as maritime commander’s advocate. In many cases, production of this material will be conducted by the joint intelligence organization or the intelligence community. The MIOC will be involved in coordinating and tailoring production.

Intelligence supports the commander’s ability to exercise C2 over the maritime force even in denied or degraded environments. Intelligence operations are wide-ranging activities conducted by the intelligence team for the purpose of providing the commander with relevant, accurate, and timely intelligence. The SIO, intelligence watch officer (IWO) or designated watch stander in the MIOC ensures the various intelligence sensors or appropriate capabilities are in alignment and optimized to current operations. He or she must quickly understand and communicate to the commander what operational impact any degradation to the intelligence architecture will have on the operation, and be prepared to rapidly reapportion assets as necessary to mitigate the degradation.

2.3.1 IPOE Functions

1. Assist the commander in formulating planning guidance by identifying significant adversary capabilities and critical operational environment factors.

2. Provide links and nodes/nodal analysis.

3. Analyze enemy objectives, enemy center(s) of gravity (ECOG)/enemy courses of action (ECOAs)/critical vulnerabilities/decisive points.

4. Develop enemy most dangerous/most likely courses of action.

5. Support blue COA development/operational planning process.

6. Assist the commander in assessing COAs against an enemy.

7. Develop or refine enemy COAs used during war gaming.

8. Provide intelligence gain/loss (IGL) assessments.
2.3.2 Composition

As assigned.

2.3.3 Points of Coordination

1. Internal:
   a. Senior SIGINT officer
   b. Red Cell
   c. Counterintelligence
   d. Planning support group
   e. Targeting
   f. Information operations cell
   g. Production and analysis
   h. Human intelligence
   i. Collection management
   j. Knowledge and information management/RFI
   k. Current intelligence watch
   l. Maritime planning group
   m. Future operations
   n. FUPLANS/MPG/OPTs
   o. Maritime assessment group
   p. Knowledge and information management WG
   q. Logistics readiness center.

2. External:
   a. Theater JIOC
   b. Joint task force/components
   c. National intelligence agencies/organizations
   d. Subordinate tactical maritime intelligence staffs.
2.3.4 Inputs

1. Combatant commander OPLAN (when applicable) with emphasis on Annex B
2. Higher headquarters plans and orders
3. National intelligence support plan
4. Theater J-2 (Intelligence directorate of a joint staff) ISR strategy
5. Theater JIOC analysis
6. Higher headquarters JIPOE
7. Component IPOEs
8. Commander’s guidance and priorities.

2.3.5 Outputs

1. Intelligence gain/lost
2. Enemy centers of gravity if applicable
3. Enemy courses of action
4. Enemy critical factors
5. Enemy objectives, critical vulnerabilities, and decisive points
6. Proposed PIRs
7. Inputs to theater intelligence task list
8. Inputs to theater ISR strategy
9. Inputs to JFC JIPOE.

2.4 INTELLIGENCE OPERATIONS

The ISE officer is the SIO’s principal representative to the FCC leadership and is charged with aligning intelligence operations with FCC operations. ISE staff oversee three critical enablers to MIOC operations: (1) intelligence KM/IM/RFI, (2) support to the commander’s assessment process, and (3) intelligence support to IO. Each of the three enablers supports a command function outside of the intelligence directorate that requires unique intelligence accesses or expanded intelligence comprehension. KM/IM/RFI is a critical enabler, acting as the MIOC’s point of coordination for all MOC KM/IM policy activities. By registering all intelligence RFIs into intelligence community RFI management systems, effective KM/IM/RFI enables the ISE staff to maintain situational awareness on the status of requests (and who is doing what in response) and, through the intelligence operations staff, provides warning to the SIO when it appears likely that critical intelligence requirements will not be serviced within the requested timeline. Whenever possible, the KM/IM/RFI will have a watch stander located with the I&W watch in the FCC.

With respect to cyberspace operations, intelligence provides an understanding of threats to U.S. and multinational operations by adversary use of cyberspace, as well as SA, I&W, and other assessments supporting decision makers, planners, and warfighters. Collection of intelligence in cyberspace, as well as the rapid integration of
all-source intelligence with cyberspace operations, is essential for military operations. Capabilities for detection and attribution of cyberspace activity support defensive operations and enable deterrence and offensive cyberspace operations. Additionally, rapid assessment of operations in and through cyberspace facilitates changes in tactics, defensive measures, and other available response options. In order to minimize the effects of threats that exploit previously unknown vulnerabilities, naval forces should conduct advanced predictive behavioral analysis to determine potential future threat vectors, and develop effective defense, mitigation, and recovery measures, to include exercising the capability to operate in a denied, degraded, or compromised cyberspace environment. (See JP 3-12, Cyberspace Operations, for more information regarding minimizing the effects of threats.)

Establishing intelligence requirements is critical to the success of collections, target development and to the entire targeting process. Collection managers and intelligence analysts, in consultation with targeteers and planners, must ensure that intelligence requirements for planning, execution, and assessment requirements are integrated into the collection plan. This intelligence support is vital for the analysis performed in target development, as well as to prepare for future targeting during the execution of operations (e.g., to pre-task real-time ISR assets) and to support assessment (JP 3-60, Joint Targeting; and Chairman of the Joint Chiefs of Staff instruction (CJCSI) 3370.01, Target Development Standards).

Intelligence is a critical contributor to the assessment process and, in some situations, commanders may choose to designate the SIO as the lead for the MOC assessment process. Assessment is a standing function of the MOC regardless of its assigned mission, and the intelligence contribution to that effort requires highly skilled intelligence personnel trained in effects operations and the command’s assessment processes. Intelligence support can provide personnel and data to any assessment-related CFT organizations and align MIOC capabilities to support the overall assessment process.

At the discretion of the commander, intelligence and IO functions may be combined into a single effort to optimize the use of intelligence, cryptology, and information capability. Information operations requires a great deal of intelligence, not just in volume but also in terms of precision and timeliness. To increase the chances that IO planning and execution will be successful, the SIO needs to have personnel trained in and familiar with its unique lexicon and requirements.

Specific ISE responsibilities for intelligence operations include:

1. Ensure the battle watch captain is informed whenever a PIR is addressed in intelligence reporting.
2. Provide COPS with inputs of intelligence issues that meet criteria for entry into the significant events log.
3. Ensure COPS has real-time access to all intelligence RFIs, their status, and what actions are being conducted to satisfy them through KM/IM/RFI.
4. Coordinate intelligence planning support with FOPS battle rhythm.
5. Ensure core intelligence functions in EPAD are supporting COPS and FOPS requirements.
6. Provide intelligence inputs to the MAG.
7. Maintain cognizance over intelligence participation in the IO cell, IO support, and fires element.
8. Ensure all intelligence activities conform to KM policies established by the MOC KM officer.
9. Act as the MIOC’s point of coordination to the KM officer.
10. Establish intelligence IM policies.
11. Act as the RFI manager for intelligence RFIs.
12. Provide situational awareness to leadership on the status of critical RFIs.

13. Ensure FCC personnel have visibility into intelligence processes.

14. Conduct effects assessment to support planning and execution.

15. Provide the commander with a predictive situational assessment of operational metrics in a dynamic environment.

16. Develop processes to enable the commander to assess attainment of desired objectives and effects covering the full range of kinetic and non-kinetic operations across the spectrum of systems (political, military, economic, social, information, and infrastructure).

17. Coordinate with the MPG, the MAG, or assessments cell in the selection of measurable desired effects.

18. Inform the commander of anticipated potential effects of actions on the operational environment to include effects on enemy, allies, neutral parties, and U.S. forces.

19. Assist in the development of measures of effectiveness (MOEs)/measures of performance (MOPs).

20. Provide intelligence support to information operations.

21. Coordinate IO-related RFIs and develop corresponding collection requirements.

22. Identify key adversary decision makers, both military and nonmilitary (this may include human factors analysis studies).

23. Identify adversary information infrastructure and its critical vulnerabilities.

24. Identify adversary IO capabilities and potential red IO COAs against the joint force.

25. Identify adversary IO vulnerabilities.

26. Provide military information support operations (MISO) profiles of adversary countries and population groups.

27. Provide cultural and other sociological information of adversary’s regional and operating environment.

28. List desired and undesired effects.

29. Provide all-source I&W to cyberspace operations, including social networking media.

2.5 COUNTERINTELLIGENCE/HUMAN INTELLIGENCE

The CI and HUMINT functions are described in this section as standalone functions directed by the SIO; however, generally this function may be combined to optimize the collection management functions and to facilitate integration of CI/HUMINT information into overall intelligence analysis efforts. Commanders require actionable intelligence from the CI and HUMINT communities to supplement technical collection in order to fully comprehend adversary intent. Counterintelligence and HUMINT often represent the best methodologies to engage against a determined, intelligent, adaptive, and elusive unconventional enemy.

Counterintelligence is information gathered and activities conducted to protect against espionage; other intelligence activities; sabotage, subversion, or assassinations conducted by or on behalf of foreign governments or elements thereof; foreign organizations; foreign persons; or terrorist activities. Human intelligence is information relating to capabilities, intentions, and activities of foreign powers, organizations, or persons but not
including counterintelligence, except for information on international terrorist activities. Human intelligence is defined as intelligence derived from human beings who may act as both sources and collectors and where the human is the primary collection instrument. This includes all forms of intelligence gathered by humans, from direct reconnaissance and observation to the use of recruited agents.

The management, direction, and deconfliction of CI and HUMINT operations may be a task for the MOC. To deal with this issue, the MOC will establish an integrated staff element to manage, coordinate, synchronize, and deconflict CI and HUMINT sources and operations. This element (usually referred to as N2X) enables the commander to initiate CI and HUMINT operations and plan for essential support services to the maximum extent possible before the outbreak of a crisis. The need for a single point of contact in each MOC is clear. The need for a separate element will depend upon the mission. The mission is to task, coordinate, synchronize, manage, and deconflict all DOD CI and HUMINT operations in the operational area.

Senior intelligence officer CI and HUMINT responsibilities include:

1. Ensure successful identification of CI and HUMINT requirements during mission analysis. Ensure initial operations concepts are included in all plans, and ensure requirements identified through mission analysis and production, or operations external to the combatant command, are coordinated with the CI and HUMINT communities.

2. Support the collection manager to identify collection requirements that can best be addressed by CI and HUMINT personnel, and ensure the collection requirements are distributed to the appropriate CI and HUMINT elements.

3. Ensure proper coordination with national agencies and military services on PIRs of potential strategic importance.

4. Act as the staff element responsible for providing CI and HUMINT policy and advisory expertise to ensure understanding of CI and HUMINT capabilities, limitations, and processes.

5. Identify and facilitate CI and HUMINT support to the staff, manage the foreign military intelligence collection activities program, and ensure CI functional services are made available to the staff.

6. Serve as focal point for identifying and coordinating CI and HUMINT support to the fleet, including the development and monitoring of CI and HUMINT requirements in support of force protection (FP), combating terrorism, and counter foreign intelligence and security services (FISS) operations on a day-to-day basis.

7. Ensure CI and HUMINT capabilities are integrated into all planning and targeting, manage current and anticipated CI and HUMINT requirements, and develop the theater-wide maritime HUMINT IPOE/COP.

8. Maintain liaison and coordination with the CCDR JIOC, other theater CI and HUMINT elements, and national level CI and HUMINT agencies (i.e., counterintelligence field activity (CIFA), Defense HUMINT Management Office, etc.).

9. Coordinate evaluation of HUMINT reporting and provide routine evaluations of HUMINT reporting statistics to the MIOC director.

2.5.1 Counterintelligence

N2 staff conducting counterintelligence operations works closely with Naval Criminal Investigative Service (NCIS) to identify and neutralize terrorist, human intelligence and security service, and subversive threats to assigned operations and assets.
Counterintelligence operations focus on the five separate but interrelated functions within DOD CI: investigations, operations, collection, analysis and production, and functional and technical services, including but not limited to technical surveillance countermeasures (TSCM), computer network operations, and polygraph.

2.5.1.1 Counterintelligence Functions

1. Coordination:
   a. Liaise with CCDR’s counterintelligence support officer (CISO) and NCIS field offices.
   b. Liaise with NCIS HQ and other CI/law enforcement agencies.
   c. Identify, facilitate, and coordinate reachback and collateral support requirements.
   d. Deconflict CI activities with other agencies, services, commands, elements, and cells.
   e. Provide CI policy and advisory expertise.
   f. Oversee and manage development and implementation of CI annexes.
   g. Develop and coordinate integration and synchronization of the commander’s requirements into the CI campaigns.

2. Investigations:
   a. Coordinate CI matters needing investigation with appropriate agency.
   b. Ensure appropriate superiors are apprised of relevant CI investigations.

3. Operations:
   a. Develop and coordinate CI operational requirements to support assigned objectives.
   b. Coordinate CI campaign requirements and support.

4. Collections:
   a. Develop and coordinate CI collection requirements to support command requirements through detection, deterrence, and disruption of espionage, sabotage, and terrorism.
   b. Address identified CI collection gaps and develop plans to close gaps (including clandestine collection operations).

5. Analysis and Production:
   a. Conduct all source analysis to identify collections requirements/gaps.
   b. Provide comprehensive analysis of foreign intelligence and security services and terrorist activities and threats affecting assigned operations/assets.
   c. Provide analytic support to investigations and operations, as required.
   d. Support assessment of I&W.
6. Functional and technical services: Provide or coordinate CI functional services for the MOC to include:
   a. Counterintelligence awareness briefings/debriefings
   b. Technical surveillance countermeasures
   c. Computer network operations
   d. Polygraph.

2.5.1.2 Composition

As required.

2.5.1.3 Points of Coordination

1. Internal:
   a. Senior SIGINT officer
   b. Information operations cell
   c. Collection management
   d. Knowledge and information management/RFI
   e. Current intelligence watch
   f. Targeting
   g. Planning support
   h. Knowledge and information management WG.

2. External:
   a. Naval Criminal Investigative Service/Multiple Threat Alert Center
   b. Joint Intelligence Task Force for Combating Terrorism
   c. Office of Naval Intelligence
   d. Theater CISO
   e. Theater J–2X
   f. Theater JIOC
   g. Theater CI services (United States Army Master Interface, United States Air Force (USAF) Office of Special Investigations)
   h. National-level CIFA, Assistant Deputy Under Secretary of Defense (CI).
2.5.1.4 Inputs

1. Analytical products from external commands
2. Intelligence information reports (IIRs) and other raw reporting
3. Debriefs.

2.5.1.5 Outputs

1. Evaluated CI reporting
2. Collection requirements
3. Terrorism/CI/criminal threat assessment.

2.5.2 Human Intelligence

The mission of Navy HUMINT is to manage, support, and conduct worldwide HUMINT collection operations to meet the tactical, operational, and strategic intelligence needs of Navy and joint operational forces. Human intelligence may also encompass interrogation techniques, including the process of questioning detainees conducted in compliance with U.S. law and regulation, international law, executive orders, and other operationally specific guidelines. It can provide a wide range of information which includes, but is not limited to, adversary plans and intentions, deliberations and decisions, research and development goals and strategies, doctrine, leadership, political or military relationships, weapons systems, physical and cultural infrastructure, and medical conditions. Human intelligence can often collect information that is difficult or sometimes impossible to collect by other more technical means.

The primary responsibilities of the N2 staff conducting HUMINT include:

1. Coordinate maritime-focused intelligence collection
2. Coordinate the conduct of overt debriefings of personnel assigned to the Navy
3. Coordinate HUMINT debriefing services to the Navy
4. Coordinate the operations of assigned Reserve HUMINT personnel.

2.5.2.1 HUMINT Functions

1. Coordinate with theater and tactical-level HUMINT organizations.
2. Liaise with HHQ and other agencies.
3. Identify, facilitate, and coordinate reachback and collateral support requirements.
4. Deconflict HUMINT activities with other agencies, services, commands, elements, and cells.
5. Develop and coordinate HUMINT operational requirements to support the commander’s objectives.
6. Coordinate HUMINT operations in the area of interest/area of operations (AO); prioritize operational requirements, and task those collectors best positioned to fulfill them.
7. Develop and coordinate HUMINT collection requirements.
8. Address identified HUMINT collection gaps, and develop plans to close gaps (including clandestine collection operations).

9. Conduct all source analysis to identify collection requirements/gaps.

10. Provide comprehensive analysis of enemy/target intentions, capabilities, and activities affecting plans and operations.

11. Support assessment of I&W.

2.5.2.2 Composition

As required.

2.5.2.3 Points of Coordination

1. Internal:
   a. Collection management.
   b. Knowledge and information management/RFI.
   c. Current intelligence watch.
   d. Targeting.
   e. Plans support.
   f. Intelligence preparation of the operational environment.
   g. Current operations.
   h. Future operations.
   i. Maritime planning group.
   j. When a MOC is fully stood up in response to a crisis or conflict, LNOs from one or more Federal agencies may be assigned in an advisory capacity. This is especially likely in cases where the MOC commander is serving as the JTF commander. The LNOs will assist by facilitating national-level HUMINT coordination and deconfliction.
   k. Knowledge and information management WG.

2. External:
   a. Defense Intelligence Agency (DIA), Department of Homeland Security
   b. Joint Intelligence Task Force for Combating Terrorism
   c. Office of Naval Intelligence–352
   d. Theater J–2X
   e. Theater JIOC
f. Selected Federal agencies, as applicable, when no LNO has been assigned

g. Pertinent DOD HUMINT executors (e.g., CCDR SIO).

2.5.2.4 Inputs

1. Analytical products from external commands

2. Intelligence information reports and other raw reporting

3. Debriefing reports.

2.5.2.5 Outputs

1. Evaluated HUMINT reporting

2. Collection requirements.

2.6 COLLECTION MANAGEMENT

Collection management is the primary agent for the administration and validation of the commander’s collection requirements, serving both the commander and assigned subordinate units. Collection management is a process led by the ISE Officer and consists of collection requirements management and collection operations management. A collection management representative is a member of the maritime targeting working group (MTWG).

2.6.1 Collection Requirements Management

1. Broker the commander’s and subordinate commanders’ CRs at the joint collection management cell/board.

2. Collaborate with theater, JTF, component, and subordinate unit collection management organizations to ensure all intelligence collection requests/requirements are identified and made visible across the joint force as early as possible.

3. Coordinate the collection plan with the commander-approved PIRs and development of the commander’s MOEs/MOPs.

4. Engage KM/IM/RFI management to ensure situational awareness of collection requirements is maintained in the FCC.

5. Coordinate collection support with the MOC fires element to ensure targeting and combat assessment requirements are addressed.

6. Coordinate collection support with the MOC fires element, prepare a draft ISR synchronization matrix, and pass to ISR operations planner for coordination.

7. Forward requests for national collection to the appropriate echelon.

2.6.2 Collection Operations Management

1. Coordinate closely with ISR TCPED and production and analysis to ensure collection operations are aligned with prioritized needs and within MOC capacity.

2. Ensure collaborative exploitation plans are in place.
3. Maintain an active dialog with the IM/KM/RFI manager and targeting officer to achieve a tight relationship between requirements and collection efforts.

4. Support ISR operations with collections personnel embedded in the FCC.

5. Coordinate collection support to IO with the IO support and the IO cell.

2.6.3 Composition

As required.

2.6.4 Points of Coordination

1. Internal:
   a. Senior SIGINT officer
   b. Planning support
   c. Intelligence preparation of the operational environment
   d. Targeting
   e. Assessment
   f. Information management/KM/RFI
   g. Intelligence, surveillance, and reconnaissance TCPED
   h. Information operations support
      i. Counterintelligence/CT
   j. Human intelligence
   k. Fleet command center FE
   l. Current operations
   m. Future operations
   n. Information operations cell
   o. Maritime planning group
   p. Knowledge and information management WG
   q. Maritime air operations cell.

2. External:
   a. Joint force commander intelligence organization
   b. Other components
   c. Subordinate intelligence organizations
2.6.5 Inputs

1. Senior intelligence officer guidance
2. Commander’s critical information requirements/PIRs.
3. Subordinate maritime commander’s critical information requirements/PIRs.

2.6.6 Outputs

1. Requests for national and theater collection
2. The commander’s intelligence collection plan for the air, surface, subsurface, littoral, and information domains.

2.7 PRODUCTION AND ANALYSIS

Analysis is the core competency of all MIOC operators. Production in the context of this NTTP refers to the analytical outputs for intelligence consumers and is not to be confused with standing intelligence production programs at the DIA or the JIOCs. This office is staffed by personnel with advanced operational intelligence skills tailored to support warfare in the maritime domain. The ISE officer ensures analytical priorities and production timelines are aligned with battle rhythm events and decision cycles.

Analytical capability will be spread across all elements of the intelligence staff. Production and analysis supports all intelligence analytical efforts through close communications with other ISE functions and by serving as the MIOC’s primary conduit into the broader defense intelligence community, where it can both leverage existing analytical and production capabilities and contribute to its outputs. Production and analysis will build relationships with JIOCs and the JTF JISE. Through those organizations and their relationship with combat support agencies, the MIOC will also gain access to support across the broader intelligence community.

2.7.1 Functions

1. Support all MOC intelligence production requirements, including updates to support events in the battle rhythm cycle.
2. Coordinate with collaborative partners for production and analysis that cannot be done organically.
3. Provide or access master-level analytical expertise in communications intelligence (COMINT), electronic intelligence (ELINT), measurement and signature intelligence (MASINT), geospatial intelligence (GEOINT), HUMINT, and open-source intelligence.

2.7.2 Composition

As assigned.

2.7.3 Points of Coordination

1. Internal:
   a. Senior intelligence officer
   b. Senior SIGINT officer
c. Current intelligence watch

d. Intelligence preparation of the operational environment

e. Planning support

f. Collection management

g. Knowledge and information management WG.

2. External:

a. Joint task force JISE

b. Theater JIOC

c. Navy Cyber Defense Operations Center

d. National intelligence agencies/organizations.

2.7.4 Inputs

1. Raw collection

2. Intelligence reports.

2.7.5 Outputs

1. Briefings

2. Spot reports.

2.8 DISSEMINATION

Dissemination is responsible for ensuring a well planned, executable information architecture that marries user needs with the realities of equipment, bandwidth, and security considerations.

2.8.1 Functions

1. Develop intelligence dissemination architecture in support of the SIO/MIOC.

   a. Build a dissemination management tracking system that includes how all systems in the intelligence center plug into the Global Information Grid, bandwidth requirements, and security requirements with support from CS and intelligence systems.

   b. Develop contingency plans for dissemination in case of loss of systems or reduction/loss of bandwidth across each pathway. Ensure those plans address pathways to interagency and multinational partners.

   c. Develop a prioritization scheme for the N2’s approval.

   d. Develop plans to monitor systems and networks with particular emphasis on possible single points of failure.

   e. Develop metrics to support real-time assessment of the dissemination process.
2. Build an intelligence collaboration plan that provides intelligence personnel with a comprehensive menu of collaboration tools, Web sites, chat rooms, e-mail directories, record message traffic, and voice circuits available to support the MOC operations and the requisite standard operating procedures (SOPs) and tactics, techniques, and procedures (TTP). Develop policies for the efficient use of each option.

3. Supported by KM/IM/RFI, develop an information dissemination plan that ensures both producers and consumers understand what information will be pushed on which pathways and what information will be posted to Web sites or entered into databases for user retrieval.

4. In conjunction with the FDO, develop information sharing plans to support the rapid dissemination of intelligence.

5. Ensure all MOC systems and policies are aligned with theater policies.

6. In conjunction with the CS and intelligence systems, develop backup and replication processes.

7. Manage all requirements for MOC personnel requiring access to systems external to the MOC.

2.8.2 Composition

As assigned.

2.8.3 Points of Coordination

1. Internal:
   a. All MIOC organizational elements
   b. Knowledge and information management WG
   c. Communications and information systems.

2. External:
   a. Joint task force JISE
   b. Theater JIOC
   c. Subordinate units
   d. National intelligence agencies/organizations.

2.8.4 Inputs

1. Information requirements of users

2. Security and dissemination policy.

2.8.5 Outputs

1. Intelligence dissemination architecture

2. Intelligence collaboration plan

3. Intelligence dissemination plan

4. Intelligence information sharing plan.
2.9 ISR TASK, COLLECT, PROCESS, EXPLOIT, AND DISSEMINATE CELL

Intelligence, surveillance, and reconnaissance TCPED represents the intelligence exploitation capability of the MIOC. Manning for this cell will be tailored to meet mission requirements and matched against assigned ISR capabilities with respect to intelligence systems and available bandwidth.

2.9.1 Functions

1. Exploit raw intelligence as assigned.

2. Provide tailored outputs to other elements of the MOC as required.

3. Provide tailored outputs to subordinate assigned commands, as required.

2.9.2 Composition

As assigned.

2.9.3 Points of Coordination

1. Senior SIGINT officer

2. Current intelligence watch

3. Information management/KM

4. Collection management

5. Targeting

6. Counterintelligence/CT

7. Intelligence preparation of the operational environment

8. Information operations support

9. Dissemination

10. Current operations

11. Future operations

12. Information operations cell

13. Knowledge and information management WG

14. Maritime air operations cell.

2.9.4 Inputs

1. Collection management plan

2. Priority intelligence requirements/RFIs.
2.9.5 Outputs

First phase exploitation of imagery, video, SIGINT, or MASINT collected in direct support of assigned missions.

2.10 INTERAGENCY/COALITION/HOST NATION GROUP

This group is made up of intelligence personnel assigned from combat support agencies, non-DOD U.S. governmental agencies or departments, and international partners. The purpose of this group is to provide an outlet for all intelligence personnel to support the intelligence operations of the MIOC, although it should not interfere with any similar command-level interagency organization.

2.10.1 Functions

1. Serve as the SIO’s primary point of coordination to integrate intelligence augmentees from the interagency, coalition nations, and the host nation (if not part of the coalition).

2. Position augmentees in the organization to fulfill the requirements that they were assigned to the MOC to perform.

3. Inform the SIO when command or DOD policies prevent augmentees from being able to complete assigned tasks.

2.10.2 Composition

As assigned.

2.10.3 Points of Coordination

1. Senior intelligence officer

2. Intelligence administration element

3. Foreign disclosure officer

4. Knowledge and information management WG

5. All affected CFTs.

2.10.4 Inputs

As required.

2.10.5 Outputs

As required.

2.11 REFERENCES

Key references from recent joint doctrine that will inform intelligence within this NTTP:

1. JP 2-0, Joint Intelligence, begins with the sentence, “Intelligence oversight and the production and integration of intelligence in military operations are inherent responsibilities of command.”

2. JP 2-01.3, Joint Tactics, Techniques, and Procedures (JTTP) for Joint Intelligence Preparation of the Battlespace.
3. JP 3-0 identifies six joint functions defined as “related activities and capabilities grouped together to help the JFC integrate, synchronize, and direct joint operations.” These functions are command and control, intelligence, fires, movement and maneuver, protection, and sustainment. As a joint function, intelligence provides the commander with “an understanding of the operational environment.”

4. JP 5-0, Joint Operation Planning, defines IPOE as a key element of joint operational planning, providing a detailed discussion of what IPOE is and what it must provide.

5. JP 3-33 provides very specific doctrinal guidance for the role of intelligence within a JTF headquarters.

6. NWP 5-01 contains specific IPOE templates for the maritime domain.
CHAPTER 3

Operations

3.1 GENERAL

In order for a MOC to properly support a commander in a fast-paced operational setting, situational awareness must be attained, maintained, and shared by watch standers throughout the headquarters on a continuous basis even in denied or degraded C4ISR environments. From a functional standpoint, this effort involves operations, intelligence, logistics, and communications and information systems. Due to its ongoing nature, these situational awareness efforts are carried out in permanent locations that are normally designated as “centers.” The level of operations discussed in this chapter is highlighted in Figure 3-1. Potential CFT elements supporting the commander’s decision cycle from an operational perspective include the protection working group, information operations cell, knowledge and information management board, fires element, rules of engagement/rules for the use of force working group, integrated air operational planning teams and missile defense cell, maritime assessment group, maritime targeting coordination board, knowledge and information management working groups, meteorological and oceanographic cell, TLAM cell, and space support group. The fleet command center is responsible for operational situational awareness for the commander. The manpower and warfare expertise required to man and operate these centers is provided by the headquarters N-code organization, but the focus is entirely on the operation being conducted, providing the knowledge of the current situation and the collaborative effort necessary to support the commander’s decision cycle.

3.2 N3 OPERATIONS DIRECTOR

NWP 3-32 describes the operations director as responsible for “the direction and control of operations, beginning with the mid- and near-term horizon planning through the completion of specific operations.” JP 3-33 states that the operations director’s responsibility is to “plan, coordinate, and integrate operations.” In joint practice, the COS treats the J-3/Operations Director as the “greater amongst equal directors,” as the J-3 is responsible for the majority of operational aspects and processes in a Joint Headquarters.
Figure 3-1. Notional MOC with Operations-related CFTs Highlighted
3.3 FLEET COMMAND CENTER

The flexibility, range, and power of modern maritime forces require close coordination and integration for effective unified action. The FCC is responsible to the commander for the operational level direction and control of operations. The BWC stands watch in the FCC, leads the 24/7 current operations watch team, and is the commander’s direct representative for all current operations. Working very closely within current operations, the FCC attains, maintains, and shares operational situational awareness by doing the following:

1. Manage and display the force’s COP.

2. Monitor and display the current operational status of friendly, enemy, and neutral forces.

3. Provide a centralized point for the handling, tracking, and recording of information. Record significant events and pending actions to a level of detail capable of reconstruction in a log.

4. Monitor execution of maritime operations.

5. Track CCIRs, execute appropriate PPRs, and make recommendations on decisions required.

6. Coordinate airspace and IAMD within the area of operations.

7. Coordinate joint air support for requirements within the area of operations.

8. Provide METOC support.


10. Draft, gain approval for, and issue operational orders (fragmentary orders (FRAGORDs)), execute orders (EXORDS), daily intentions message (DIMS), etc.) to subordinate maritime commanders.

11. Establish and maintain regional maritime situational awareness (RMSA). The MOCs’ RMSA, as well as other Services and agencies, feed into the United States’ collective efforts to maintain maritime domain awareness.

12. Monitor execution of ISR collection operations and, in coordination with the MIROC collection management staff, re-task ISR assets. This function is conducted by the FCC ISR operations team.

13. Monitor health and defense status of the network and communications transport architecture and, in coordination with the NCCC, reallocate network and communications transport resources.

3.4 CURRENT OPERATIONS CELL

Current operations very often is carried out principally by a designated cell, but it does not matter what CFT term is used; it is the function or activity that must be understood and performed by a MOC in support of the commander. COPS primarily focuses on monitoring and assessing ongoing operations and the execution of the commander’s intentions. COPS is responsible for overseeing and providing quality control during an operation for the implementation and coordination of the commander’s orders. COPS is the central point for all CFTs to forward key events and to receive information related to the execution of operations. COPS is responsible for monitoring the current situation and reflecting any changes to the execution of assigned orders by all subordinate forces. COPS, in coordination with other cells, must be capable of short-term operation planning, usually through a crisis action team (CAT). COPS must also monitor the commander’s critical information requirements. CCIRs identify key pieces of information that, if received, necessitate immediate action by the commander. Commander’s critical information requirements constitute information requirements identified by the commander as being critical in facilitating both timely information management and the decision-making process that affect successful mission accomplishment. The two key subcomponents are critical friendly force information...
requirements (FFIR) and PIRs. Current CCIRs should be disseminated and known throughout the MOC. Fulfillment of a CCIR, by definition, requires a decision by the commander and adjustments to current or future operations. COPS is composed of a team of experts in various warfare areas who routinely communicate current events across various planning cells.

### 3.4.1 Functions

1. Track the readiness of forces assigned to the commander.
2. Maintain situational understanding of operations in execution and those to be executed in the near future.
3. Synchronize, coordinate, deconflict, and/or integrate maritime operations with other joint force operations.
4. Assemble CAT; conduct rapid response planning as required.
5. Supervise the establishment, maintenance, and sharing of the COP.
6. Collect and analyze current operations MOPs, synthesize task assessments, and collect and pass MOE indicator data for effects assessment.
7. Coordinate and monitor orders in execution (OPORDs, FRAGORDs, ATOs, and other current directives).
8. Establish and manage the FCC composition, layout, and organization.
9. Execute the battle rhythm.
10. Manage the execution of the current plan.
11. Communicate the commander’s directions to subordinate commands (task forces, groups, units, and elements).
12. Draft and release intentions or orders messages and the daily situation report.
13. Monitor status of the commander’s critical information links in coordination with the joint communication control center (JCCC); direct rapid restore of alternate communications and satellite communication (SATCOM) links in accordance with operational tasking communication (OPTASK COMM) and/or degraded SATCOM fallout plan.
14. Direct resolution activities in order to regain communications and SATCOM bandwidth; task CIS staff to assess and act to resolve any interference on communication links.
15. Prepare required daily morning update briefings.
16. Track commander’s CCIRs and immediately report relevant information to the MOC director, the director of operations, the SIO, and the commander.
17. Ensure the antiterrorism/force protection (AT/FP) conditions are appropriate for the current situation.
18. Coordinate with staff judge advocate (SJA) to ensure ROE/RUF support the force in carrying out the mission.
19. Track and maintain an operations RFI process.

### 3.4.2 Composition

COPS is composed of experts in various warfare areas, intelligence, and cryptology who routinely communicate current events across various planning cells. The BWC stands watch in the FCC, leads the 24/7 current operations
watch team, and is the commander’s direct representative for all current operations. Current operations may be carried out by:

1. Director of current operations
2. Battle watch captain
3. Assistant BWC or fleet watch officer (FWO)
4. Intelligence operations/I&W watch officer
5. Intelligence, surveillance, and reconnaissance operations officer
6. Fires watch officer
7. Maritime dynamic targeting chief (fires watch officer and MDT chief may be combined into one watch if operating tempo allows)
8. Air warfare officer
9. Integrated air and missile defense officer
10. Antisubmarine warfare officer
11. Surface warfare officer
12. Submarine warfare officer
13. Mine warfare officer
14. Amphibious warfare officer
15. Special warfare officer
16. Explosive ordnance disposal (EOD) officer
17. Information operations cell and SIGINT representative
18. Intelligence representative
19. Liaison officers (e.g., joint force air component commander (JFACC); joint force land component commander (JFLCC); joint force special operations component commander (JFSOCC); United States Marine Corps (USMC); commander, task force; coalition; logistics; medical; and major subordinate commands, as appropriate)
20. Global Command and Control System (GCCS) operator (Blue track database manager)
21. Knowledge and information management watch officer
22. Commander’s update briefing team
23. Joint interface control officer (JICO)
24. Crisis action team lead or planner (to support the CAT planning function COPS must perform).
Preferred COPS composition involves both permanent and on-call members and, depending upon the level of operational organization (e.g., Navy component command HQ, JFMCC, JTF) and the type and complexity of the mission FHA/DSCA to a major combat operation), positions listed above may be expanded, combined, or eliminated altogether.

3.4.3 Points of Coordination

1. Internal:
   a. The commander, MOC director, and staff principals
   b. Future operations cell
   c. FUPLANS/MPG/OPTs
   d. Fires element targeting team
   e. Maritime air operations cell
   f. IAMD cell
   g. Maritime intelligence operations center
   h. Communications and information systems center, JICO
      i. Meteorological and oceanographic cell
   j. Component and coalition/combined LNOs
   k. Knowledge management officer
   l. Logistics readiness center
   m. Staff judge advocate
   n. Information operations POC (N6 and JICO for line of sight (LOS) and SATCOM circuits)
   o. Counterintelligence/human intelligence officer (N2X)
   p. Personnel recovery officer
   q. AT/FP
   r. Communications and information system
   s. Public affairs officer (PAO).

2. External:
   a. Higher headquarters
   b. Subordinate commands
   c. Other component commands.
3.4.4 Inputs

1. Common operational picture
2. Operational plans and approved orders
3. Unit and tactical commander readiness status reports, combat assessments, and evaluations
4. Daily intelligence brief
5. Daily IO brief input
6. Current METOC/space products
7. Results of headquarters principals’ meeting (commander, COS, ACOSs, directors, special assistants)
8. Record message traffic
9. Other joint component and coalition products (ATO, area air defense plan (AADP), status reports, awareness documents, or indicators)
10. Nongovernmental organizations (NGOs), governmental organizations, and international organizations
11. Requests for information, requests for assistance, requests for forces (RFFs)
12. Commander’s critical information requirements
13. Collaboration at Sea Web sites
14. Open-source reporting (e.g., cable, local TV, or radio news programming)
15. E-mail/chat
16. Maritime liaison office/automated information system
17. Maritime assessment group findings
18. IPOE, I&W, and intelligence products from the MIOC
19. MOEs/MOPs
20. CONOPS briefs and plans
21. JFCs TST, high-value target (HVT), HPT matrix
22. JFC, JFMCC dynamic target matrixes and MDT matrix
23. Maritime prioritized target list
24. JFC/JFMCC ROE matrix.

3.4.5 Outputs

The commander’s update brief is a comprehensive review of the events that recently have occurred and operations that are planned for execution in the near future. Input is collated from all staff codes and presented in a briefing format. The brief provides situational understanding for the staff. The daily commander’s update is one of the primary formalized products produced by COPS; however, immediate message traffic and FRAGORDs may be
produced by COPS dependent on the situation. Current operations is also responsible for distributing commander’s guidance. Outputs from current operations may include the following:

1. Daily briefings (up and down the chain)
2. Guidance and intentions messages (daily, weekly, biweekly, monthly intentions, SITREP, etc.)
3. Orders (EXORDS, FRAGORDs)
4. Air support request and allocation requirements to the JFACC (when delegated to subordinate commanders, ensure that it encompasses all JFMCC requirements)
5. Morning summary to commander (overnight update)
6. Message traffic summary for the commander
7. Significant events log/watch log
8. Current operations turnover brief
9. C2 incident reports
10. Crisis action plans.

3.5 FUTURE OPERATIONS CELL

Future operations conducts operational-level planning for potential midterm operations (branch plans). Anticipated or desired actions that require any analytical rigor, within the realm of the existing supporting plan, are staffed here. Generally, operational plans are developed by FUPLANS, synchronized and coordinated through FOPS, and then executed by COPS.

Future operations uses the same six-step operation planning process described in NWP 5-01, (refer to chapter 5 for planning details). FOPS handles branch planning based on an operation not progressing as planned or unanticipated adversary action. In conjunction with the MPG and COPS, FOPS works to conduct rapid planning in support of the branch plan and has the responsibility to recommend changing force apportionment and resourcing in response to a branch plan.

FOPS operates continuously and is composed of experts in various warfare areas (who are assembled as the FOPS director deems necessary) to plan, develop commander’s guidance, prepare orders, and liaison with subordinates, other components and higher headquarters. In order to identify and resolve coordination gaps and conflicts or opportunities, FOPS personnel must communicate frequently with COPS, with subordinate commands and their LNOs, and with all supporting components. FOPS must resolve competing resource requirements prior to the commander’s plan approval.

As mentioned above, the MOC director determines the division of labor between COPS and FOPS and establishes procedures for the handoff of tasks between the two. Using time horizons for future activities as guideposts for which part of the organization is assigned to initially plan or replan an operation has been common in the past, but other considerations may outweigh an arbitrary dividing line. These considerations might include the type of operation or campaign the command is involved in, the complexity or difficulty involved in the task, the general intensity of ongoing operations, etc. This NTTP does not prescribe strict time horizons but instead leaves it to the commander to choose based on his assessment of the situation. To ensure the primary focus of COPS remains on monitoring and directing current operations, planning and replanning efforts should be handed off to FOPS or the MPG whenever possible to take advantage of planning expertise and resource knowledge residing there.

Logically, the MPG is responsible for the development of each phase for a plan and the publishing of the OPLANs. The OPORDs, EXORDs, and FRAGORDs should be produced by COPS or FOPS. The order should
be written by the group that conducted the planning, as the order must accurately communicate the thought process that went into plan development.

3.5.1 Functions

The focus of FOPS is the development of plans and orders for operations that are inside the threshold of the long-term efforts of the MPG. FOPS is focused on the “what if?” of operations in that time horizon beyond COPS focus but within the current phase of the operation. Planning processes and products generally require significant coordination with elements internal to the staff; they will also require coordination with entities external to the staff. FOPS and COPS may need to leverage functional expertise. Specific functions of FOPS include:

1. Develop phased and synchronized near-term branch plans.
2. Recommend changes to the commander’s CCIRs based on revisions to existing plans and branch plans.
3. Provide a daily briefing focusing on plan development and coordination issues that may impact mission success.
4. Propose changes to prioritization of operational objectives (OOs) to guide targeting objectives and priorities. Coordinate with SJA to ensure targeting is in accordance with the law of armed conflict and the MIOC to ensure the intelligence supports the fulfillment of the CCIRs.

3.5.2 Composition

FOPS may be organized into one or more OPTs. Participation of the staff’s special assistants and other resident expertise may be necessary on an ad hoc basis, depending on the level of organization and the type of operation being planned. See section 5.3 for an expanded description of what an OPT does.

1. Director
2. Planning team leader(s)
3. Warfare area planners (strike, air, surface, submarine, antisubmarine, mine warfare, amphibious (Navy), amphibious (USMC), special warfare, EOD)
4. Logistics planner
5. Facilities/engineer planner
6. Meteorological and oceanographic planner
7. Information operations planner
8. Targeting planner
9. Communications and information system planner
10. Liaison officers (components, coalition, superiors, and subordinates)
11. Medical planner
12. Staff judge advocate
13. Public affairs (PA) planner
14. JOPES planner
15. Information manager
16. AT/FP planner.

3.5.3 Points of Coordination

1. Internal:
   a. Intelligence director
   b. Current operations
   c. Maritime planning group
   d. Liaison officers
   e. Fires element
   f. Maritime air operations cell
   g. AMD cell
   h. Maritime intelligence operations center
   i. Logistics readiness center
   j. CISC/NCCC
   k. Communications officer (COMMO) and JICO (for LOS and SATCOM circuit restoral/resolution)
   l. Information operations cell
   m. Staff judge advocate
   n. Civil-military operations (CMO)
   o. KMO/knowledge and information management WG
   p. Communications and information system
   q. AT/FP WG.

2. External:
   a. Higher headquarters
   b. Component commands
   c. Subordinate commands.

3.5.4 Inputs

1. Approved plans and staff estimates provided by the MPG
2. MOE and MOP
3. Results of headquarters principals’ meeting (commander, COS, ACOSs, directors, special assistants, MOC director)


5. Higher headquarters orders/guidance

6. Request for forces/request for capabilities (RFC)/maritime support request (MSR)/AIRSUPREQ

7. Subordinate commander feasibility assessment, status reports, combat assessments and evaluations, targeting nominations, and force allocation recommendations

8. Findings of maritime assessment group

9. Intelligence preparation of the operational environment

10. Commander’s guidance and intent.

3.5.5 Outputs

1. Branch plan, to include transition brief, approved orders, synchronization matrix, execution checklist, decision points, MOEs, and MOPs

2. Change force allocation and resourcing for branch plan

3. Inputs to monthly, biweekly, or weekly intentions message

4. The commander’s operational orders (e.g., OPORD/EXORD), complex FRAGORDs, and/or periodic intentions messages in support of the maritime supporting plan

5. Request for forces/RFC/MSR

6. Updated decision briefs to the commander (mission analysis brief, COA decision brief, and CONOPS brief)

7. Daily input to the commander’s update brief.

3.6 MARITIME AIR OPERATIONS CELL

Maritime air operations support maritime operations and integrate into other joint force operations and, thus, require operational-level planning, coordination, and synchronization among the maritime force, with other components, and with higher authority. Maritime air planners must coordinate and synchronize multiple carrier and expeditionary strike groups, Navy and USMC fixed- and rotary-wing aircraft ashore and afloat, unmanned air systems, shore-based maritime patrol and reconnaissance aircraft, Navy logistics flights, and joint air missions supporting the maritime force.

3.6.1 Definitions of Maritime Air Operations

There are two types of air missions that may be assigned to support maritime missions and tasks:

1. Organic air operations: Air operations performed by organic maritime air capabilities/forces in support of maritime operations. Organic missions were commonly known as direct support.
2. Joint air operations: Air operations performed with air capabilities/forces made available by components in support of the joint force commander’s operation or campaign objectives in support of other components of the joint force. Joint air missions were commonly known as common use.

Organic missions are tasked through the Navy warfare mission planning and scheduling processes (e.g., aircraft carrier/amphibious assault ship (general purpose) air plan or flight schedules). They are typically listed on the ATO (if there is a combined air operations center (CAOC) supporting the operation) for joint visibility, coordination, and mission number and identification, friend or foe assignment. A common practice was to append an “N” prefix to the ATO mission number (e.g., N6523) for organic maritime missions, making it easier to distinguish between organic maritime and joint air missions. This facilitates identification of assets dynamic retasking or retargeting. The advantages of using organic aircraft to support maritime missions and task are:

1. Navy aircrews are trained to support maritime missions.
2. Most Navy aircraft are collocated with the maritime force.
3. Scheduling does not require several days lead times. Aircraft may be tasked in a day or even hours.

Maritime forces aircraft available for mission tasking but not needed to conduct maritime missions (i.e., excess assets) can be made available to support other components and are called joint air missions. These excess sorties are typically made available to the JFACC through the ALLOREQ process. The CAOC tasks the excess maritime sorties with other joint air assets based on the JFC’s air apportionment decision. The JFMCC/NCC is the supported commander in the maritime AO. If the maritime component does not have enough organic air capabilities or forces to conduct maritime missions, the JFMCC will request support, and the JFACC may task joint air assets based on availability and the JFC’s air apportionment decision. The inclusion of component organic air assets on the ATO does not imply command or tasking authority, nor does it restrict a component commander’s flexibility to respond to dynamic requirements using organic assets.1

3.6.2 Maritime and Joint Air Operations Planning

Maritime air operation planning is a collaborative effort between the MOC and CTFs/composite warfare commanders (CWCs) (CSGs/ESGs/TSCs). The maritime commander provides the overall operational-level guidance, and the specific planning is conducted largely by tactical-level forces. Integration into the joint air tasking cycle will require coordinated, cross-functional MOC and subordinate staff involvement, particularly if the maritime force is comprised of multiple strike groups and land-based maritime aircraft. Within the MOC, the MAOC coordinates organic maritime air operations planning and execution with the subordinate staffs. While much of the air planning coordination is conducted between maritime tactical warfare commanders and the CAOC, the maritime air operations cell may create airspace control measures (ACMs), provide air battle plan shell inputs, change maritime organic air operations, and monitor joint air operations execution using theater battle management core system (TBMCS) or Web-based air operations center (AOC) portal tools.

The joint air tasking cycle is used by the JFACC for the employment of available joint air capabilities. The joint air tasking cycle supports joint targeting and is related to deliberate targeting phases discussed in section 3.7.1.1. The joint air tasking cycle is normally a 72-hour cycle which begins with the JFC’s objectives and guidance and culminates with execution followed by combat assessment (CA) of previous actions. The ATO provides tasking for joint air operations for a specific time period, normally 24 hours. Detailed maritime component planning normally begins 72–96 hours in advance of the execution period to enable the integration of all requirements, including joint air strategy inputs. The net result of this planning effort is that there are usually three ATOs in various stages of progress at any one time: the ATO currently being executed, the ATO being developed/produced, and the ATO in planning. Additionally, CA occurs during execution and post execution for each ATO. The naval and amphibious liaison element (NALE) will brief CAOC personnel on the maritime scheme of maneuver to ensure integration with other joint operations.

Based on warfare commander requirements and JFMCC/NCC guidance and intent, subordinate maritime commanders determine the level of maritime air operations required to execute maritime tasks and the number, if any, of excess assets available for joint air missions. The MAOC will coordinate any necessary resolution of excess air assets to ensure that all CTFs/CWC are provided with appropriate support. The MOC will approve the daily allocation request, sent to the JFACC approximately 24–36 hours before ATO execution, detailing excess asset availability, by mission type, platform, and times. The MOC, with inputs from the CTFs/CWC, will request support from the CAOC for joint air missions, with the exception of deliberate targeting missions, using the appropriate air support request format.

Maritime requests for joint targeting support are requested through submission of the daily maritime target nomination list described in paragraph 3.7.1.2. Air support request is used for missions such as defensive counterair, surface combat air patrol, or aerial refueling. The CTFs/CWC may be given direct liaison authorized (DIRLAUTH) to deal directly with the MAOC for coordination of airspace, air defense, organic, and joint air missions. Maritime organic missions (i.e., tactical air (TACAIR), rotary wing, unmanned aerial vehicles, maritime patrol and reconnaissance aircraft, and Tomahawk missiles) will be incorporated into the ATO via TBMCS by CTFs and the MOC TLAM cell using an ATO shell. The ATO shell is sent to the MOC and CTFs to build the maritime missions and submit a completed ATO shell back to the CAOC for merging with other components, organic missions and joint air missions. NALE personnel ensure the merged ATO properly reflects JFMCC/NCC missions and/or is appropriately changed before or during the execution cycle.

3.6.3 Airspace Control Orders

The JFC typically designates the JFACC as the airspace control authority (ACA). The ACA coordinates and integrates the use of the airspace in the JOA. The airspace control plan (ACP) and airspace control order (ACO) express how the airspace will be used to support mission accomplishment. In coordination with other component commanders, the ACA develops and distributes the ACP, which is implemented through the ACO. The JFMCC/NCC and subordinate commanders prepare maritime battle space requirements to include air, land, and water space, and fire control measures. JFMCC/NCC airspace coordinating measure (ACM) development and inputs are processed through the MOC for inclusion in the ACO. The maritime commander may establish a DIRLAUTH relationship for direct coordination between tactical forces and the CAOC. Typical maritime inputs to the ACO may include strike group operations areas, amphibious objective area, combat air patrol stations, defensive counterair stations, fighter engagement zones, missile engagement zones, joint engagement zones, tactical TLAM corridors, minimum risk routes, return-to-force routes, no drop zones, ordnance drop areas, aerial refueling tracks, and surveillance tracks.

3.6.4 Special Instructions

The maritime air operations cell will ensure that procedures required to operate in the maritime AO are included in the ATO special instructions (SPINS). Procedures must be provided for joint air missions supporting maritime operations that may not be familiar with maritime procedures listed in OPTASKS and other TTP.

3.6.5 Personnel Recovery

Personnel recovery (PR) is often conducted as an air operation but other means, such as land forces, ships, submarines, and boats, may be used as well. PR has five activities: report, locate, support, recover, and reintegrate. The JFMCC/NCC is responsible for planning and conducting PR in support of their own operations and for events occurring within the maritime AO or as tasked by higher authority. MOC planners should consider the capabilities of other components, multinational forces, other U.S. Government departments and agencies, intergovernmental organizations (IGOs), and NGOs operating in the AO.

A JFMCC/NCC will establish a personnel recovery coordination cell (PRCC) as necessary to support maritime and joint operations. PRCC responsibilities are normally delegated to the CWC or a tactical warfare commander. Integration of personnel recovery plans with other joint operations will be coordinated by the PRCC assisted by the MAOC. The PRCC director is responsible for the coordination of component forces in the performance of PR missions. JP 3-50, Personnel Recovery, delineates the responsibilities of component commanders with respect to the five PR tasks. The JTF joint personnel recovery center (JPRC) will coordinate with each PRCC to facilitate PR. JPRC will coordinate component requests for joint assets or assistance when a component cannot accomplish
a PR mission within its AO or when another component has a better capability to respond. NWP 3-50.1, Navy Search And Rescue (SAR) Manual, spells out Navy PR missions in permissive environments (including surface, air, and submarine disaster SAR missions). Naval combat search and rescue doctrine is described in NWP 3-50.22, Combat Search and Rescue, and NTTP 3-03.4, Naval Strike and Air Warfare.

3.6.6 Naval and Amphibious Liaison Element

The principal responsibility of the NALE is to represent the JFMCC’s interests with the JFACC and AOC. The JFMCC should establish a NALE to meet maritime scheme of maneuver and coordination requirements. The NALE consists of Navy personnel facilitating integration of JFMCC/NCC guidance and intent into joint air operations. The NALE coordinates the inclusion of JFMCC objectives and maritime requirements in the JFACC air operations directive (AOD), advocates the inclusion of JFMCC targets into the joint integrated prioritized target list, and collaborates on maritime airspace requirements and development of appropriate ACM. The NALE facilitates integration of the JFMCC air battle plan into the ATO, deconflicts all naval air and surface activities in the JFACC’s ATO, and assists air missions planning when necessary. The NALE monitors execution of joint air operations, ensuring maritime targets are serviced and organic missions in support of maritime operations are properly integrated or coordinated. The NALE TLAM representative plays an important role in TLAM coordination, including ACMs with the AOC. As collaboration tools and network-centric operations between the CAOC, the MOC, and the CTFs become more enhanced and reliable, the NALE activities will become more focused on those activities requiring rapid or uninterruptable responses for JFMCC support.

3.6.7 Maritime Air Operations Cell Composition

The MAOC is comprised from the MOC, to include Reserve Component personnel trained in the planning and execution of organic and joint air operations, targeting, airspace command and control, ATO development, TLAM, and air defense. The maritime air operations cell will interface with other CFT and component liaisons within the MOC and externally to the CAOC and subordinate air commands.

3.6.8 Points of Coordination

1. Internal
   a. Current operations
   b. Future operations
   c. Fires element
   d. Tomahawk land-attack missile cell
   e. Maritime intelligence operations center ISE
   f. Information operations cell
   g. Integrated air and missile defense cell.

2. External
   a. Subordinate maritime commands
   b. Combined air operations center
   c. Area air defense commander
   d. Airspace control authority
e. Joint operations center
f. Other components
g. Naval and amphibious liaison element.

3.6.9 Inputs

1. OPLANs/OPORDs/TCP
2. MARSUPLAN
3. Joint air operations plan (JAOP) (AOD/ACO/ADP)
4. JFC and maritime commanders’ guidance and intent including mission priorities
5. Daily intentions message
6. MTNL and MTPL
7. Subordinate maritime commanders’ excess sorties
8. Subordinate maritime commanders’ airspace, IAMD, and air support requirements
9. Component commander TLAM target nominations for planning and execution
10. Air tasking order for maritime organic and joint air operations.

3.6.10 Outputs

1. Maritime objectives and tasks input to the JFACC JAOP/AOD
2. Maritime airspace inputs to the ACA
3. TLAM mission inputs to the ATO as necessary to assist TLAM cell
4. Maritime targets to the JFACC TET
5. Air battle plan/ATO guidance to CSGs/ESGs/TSCs
6. Air allocation request to CAOC
7. Air support request to CAOC
8. Air tasking order change requests to CAOC.

3.7 FIRES ELEMENT

This section addresses fires at the maritime component level. Joint task force/JFC fires are addressed in JP 3-33, Joint Task Force Headquarters; JP 3-60, and the United States Joint Forces Command (USJFCOM) Joint Fires Handbook.²

² Despite the disestablishment of USJFCOM, the United States Joint Forces Command Fires Handbook remains a valuable procedural document.
The fires element is an integrating staff arrangement that synchronizes and coordinates dynamic and deliberate fires planning. To effectively conduct targeting, the commander may order the formation of an FE. The FE is an optional staff element that can be comprised of permanent members, members from other cells and centers, MOC augmentees, and members of other MOCs through functional load sharing.

The fires element performs three distinct but related targeting functions: operational planning, deliberate targeting, and dynamic targeting. Fires and targeting personnel who contribute to the various MOC fires functions are organized in the FE for standardization and coordination. The FE is a matrixed organization and is responsible for the coordination of all fires functions. Fires personnel may be assigned from another center (e.g., intelligence targeting personnel for deliberate targeting) or may be assigned to perform duties under the direction of other MOC centers and cells (e.g., MDT chief to COPS BWC). The TLAM cell is also assigned to the FE and provides expertise as needed for operational-level planning and targeting in addition to principal responsibilities for TLAM strike and mission planning and coordination for organic and joint deliberate and dynamic TLAM execution.

The MOC targeting and fires functions and manning can be tailored according to mission requirements. A full FE may be required for major combat operations, whereas a humanitarian crisis may require little or no targeting capability. The MOC fires element functions cross several internal MOC organizations and interface with subordinate tactical forces.

Both maritime deliberate and dynamic targeting are coordinated operational- and tactical-level processes that require the integration of inputs from both the MOC and subordinate tactical commands. Figure 3-2 shows the cross organizational interfaces of MOC fires element functions.
3.7.1 Maritime Deliberate Targeting

Deliberate targeting manages and prosecutes planned targets. These are targets that are known to exist in the operational environment with engagement action scheduled against them to create the effects desired to support achievement of JFC objectives.\(^3\)

Targeting mechanisms exist at multiple levels. Joint force components identify requirements, nominate targets that are outside their boundaries or exceed the capabilities of organic or supporting assets, and conduct execution planning.\(^4\)

Deliberate targeting typically focuses on planned targets. The objective of the maritime deliberate targeting process is to develop targets within the maritime AO that will be paired with organic fires assets and to provide maritime target recommendations both within and outside the maritime AO to the joint targeting process for pairing with joint assets. Appendix E provides a detailed description of the maritime deliberate targeting process.

3.7.1.1 Functions

Subordinate tactical commanders will nominate targets that impact their operations. These targets are consolidated and prioritized by the MOC fires element. Targeting within the MOC is largely a combined operations and intelligence function. Close cooperation and coordination between intelligence and operation directorates is required for successful maritime targeting.

MOC operations and intelligence targeting personnel will interface directly with the JFC targeting organizations, other components, federated partners, and subordinate commands to ensure unity of effort toward maritime objectives. The maritime targeting process is synchronized with joint targeting by aligning the MOC battle rhythm with the timelines and products of the JFC and the other component commanders.

Deliberate targeting functions include:

1. Conduct target development.
2. Nominate potential targets for inclusion in the JTL, RTL, and NSL.
3. Nominate targets for inclusion on the JFC’s TST list and maintain own lists of component critical targets. Maritime dynamic targets are JFMCC component critical targets.
4. Provide appropriate representation to the joint fires element (JFE) and joint targeting coordination board (JTCB) when established.
5. Consolidate and nominate prioritized targets for inclusion in the JIPTL.
6. Provide timely and accurate reporting to the JFE in support of joint operations assessment.
7. Provide tactical and operational assessment.
8. Assess and identify no-hit targets passed on IGL and joint restricted frequency list (JRFL) requirements.

3.7.1.2 Maritime Deliberate Targeting Composition

3.7.1.2.1 Targeting Team

The targeting team forms the core of the MTWG and is led by the MOC senior targeting officer or the fires lead. The MOC targeting team is composed of FE officers, qualified targeting officers from intelligence, and other

\(^3\) JP 3-60.
\(^4\) JP 3-60.
personnel who participate in the various targeting boards and working groups through networked collaborative
tools. The number of targeting officers and targeteers will depend on scenario targeting requirements.

The targeting team will collect subordinate tactical commander targeting requirements, deconflict target
nominations, and collate all maritime targets into draft MPTL and MTNL. The targeting team integrates lethal
and nonlethal targeting options into the MPTL and MTNL. The targeting team consists of:

1. Fires lead. The fires lead is responsible for the entire FE; however, most of the fires lead’s time will be
   spent working on maritime deliberate targeting.

2. Senior targeting officer/MTWG lead.

3. Targeting officer(s)/targeteer(s) (intelligence plans).

4. Information operations representative.

5. Collection management representative.


**Note**

The only trained targeting officers are resident in the MOC, the air wing, and Marine
amphibious forces. MOC, air wing, and amphibious targeting officers should support
other warfare commanders as much as possible.

### 3.7.1.2.2 Joint Targeting Representatives

The MOC joint targeting representatives monitor and participate in the joint targeting process at the JFE and AOC
from the MOC through networked collaborative tools or as the NALE at the air operations center. Maritime joint
targeting representatives represent the maritime commander’s requirements. Representatives at the MOC can
make up for a reduced NALE footprint at the air operations center and liaison officers at the JFC. The MOC’s
AOD representative requires thorough understanding of the maritime plan and the maritime commander’s
intentions. The MOC’s TET representative(s) should be completely knowledgeable of the JFMCC operational
scheme of maneuver and objectives, targeting requirements, and priorities and should have wide understanding of
Navy weapon capability. The master air attack plan (MAAP) representatives require tactical and tanker
requirements awareness as well as expertise in each aircraft weapon capability assigned to the maritime force.
Carrier strike group/air wing presence as MAAP representatives on the MOC’s joint targeting team is one way to
provide the most knowledgeable participants for the MAAP build. Joint fires representatives/NALE participate in
maritime targeting with the targeting team as operations allow. Training should allow joint targeting
representatives to be interchangeable with targeting team personnel, and each can be used to supplement the
activities of the other. The NALE will focus on AOD development and JIPTL prioritization (if the JFC has
delegated joint targeting responsibility to the JFACC). The NALE’s primary responsibility is as the JFMCC’s
interface with the JFACC. Joint targeting representatives consist of:

1. Air operations directive development representative.

2. Targeting effects team capabilities analysis representative.

3. Master air attack plan team representatives. Expertise is required for each aircraft weapon capability
   assigned to the maritime force.

4. Airspace coordination representative.
3.7.1.3 Points of Coordination

1. Internal:
   a. Maritime planning group
   b. Future operations
   c. Maritime intelligence operations center targeting
   d. Maritime intelligence operations center collections management
   e. Integrated air and missile defense cell
   f. Tomahawk land-attack missile cell
   g. Information operations cell
   h. Staff judge advocate
   i. Knowledge and information WG
   j. Logistics readiness center
   k. Maritime air operations cell.

2. External:
   a. Joint force commander JFE
   b. Joint targeting working group, joint targeting coordination board, combined effects coordination board (as applicable)
   c. Component targeting cells
   d. Subordinate CTFs, CWCs, and warfare commanders.

3.7.1.4 Inputs

1. Higher headquarters commander’s guidance
2. Maritime commander’s guidance
3. Subordinate tactical commander target nominations
4. Maritime operations center targeting nominations
5. Mission reports (MISREPs)
6. Combat assessment results
7. Intelligence gain/lost statement
8. Joint restricted frequency list.
3.7.1.5 Outputs

1. Maritime commander’s targeting guidance
2. Target development nominations
3. Target folders
4. Maritime target nomination list
5. Maritime prioritized target list
6. Time-sensitive target recommendations
7. Maritime dynamic targeting list
8. Collection requirements
9. Input to JFC guidance
10. Input to JFACC AOD.

3.7.2 Maritime Dynamic Targeting

Detailed maritime dynamic targeting TTP can be found in Navy Warfare Development Command TM 3-03.1-11, Maritime Dynamic Targeting.

3.7.2.1 Functions

TSTs and MDTs require rapid prosecution because of the immediate threat they pose to friendly forces, or knowledge of their location is fleeting and chance for prosecution may be lost. Dynamic targeting is broken down into six steps: find, fix, track, target, engage, and assess (F2T2EA), or the kill chain. Dynamic target prosecution (F2T2EA) is the responsibility of warfare commanders (e.g., surface ship prosecution is the responsibility of the surface warfare commander). If mission prioritization is a question, JFC’s objectives and guidance for TSTs and the maritime commander’s objectives and targeting guidance for MDT provide guidance for prioritization of mission requirements and assists the warfare commander in determining targeting requirements. MOC watch standers provide real-time mission guidance as needed.

When ISR or additional strike assets are not available within the maritime force, the MOC will coordinate with other components and the JFC for external support.

In order to achieve timeliness in a dynamic target engagement sequence, the MOC watch staff must have the commander’s permission to act on the commander’s behalf in the prosecution of MDTs and TSTs. Likewise, the commander should delegate engagement authority to subordinate warfare commanders and onscene commanders to the greatest extent possible.

Joint Automated Deep Operations Coordination System (JADOCS) is used to provide a common understanding of the dynamic targeting problem and to rapidly coordinate dynamic targeting requirements between warfare commanders, the MOC, other components, and the JFC. Distributed common ground station-Navy provides a dynamic ISR capability that complements JADOCS.

The MOC’s function in dynamic targeting is to:

1. Coordinate development of the maritime commander’s MDT list. Coordinate daily TST nominations to the JFC. Nominated targets that are not selected as TSTs are included on the maritime commander’s MDT list.
2. Coordinate development of maritime commander’s dynamic targeting guidance (MDT matrix) to include maritime dynamic target prioritization, engagement authority, and ROE and positive identification and collateral damage estimation (CDE) requirements. The MDT targeting guidance supplements the JFC TST targeting guidance.

3. Document enemy maritime order of battle on the JTL, where appropriate, to allow integration of maritime targets in the dynamic targeting process. (Larger mobile maritime targets, such as ships and submarines should be given unit identifiers similar to mobile enemy land forces instead of BEs. Small maritime targets, such as fast inshore attack craft, that exist in large numbers and many different types should be excluded.)

4. Consolidate and distribute procedures developed by warfare commanders defining how other component assets join (check in) and operate in naval operations.

5. Monitor prosecution of maritime dynamic targets and TSTs (F2T2EA) by tactical forces.

6. Coordinate assistance when needed by subordinate maritime commanders in prosecuting maritime dynamic targets.

7. Coordinate dynamic targeting requirements with other components and the JFC.

8. Coordinate authority to engage targets when engagement authority resides with the maritime commander, the JFC, or higher.

### 3.7.2.2 Composition

MDT personnel fill 24/7 watch positions on the COPS watch floor, and report to the BWC for the execution of dynamic targeting. Organizationally, MDT personnel are assigned to the FE under the fires lead to provide overall targeting guidance and training for the performance of their duties. The number of assigned MDT coordinators is tailorable and is based on coordination requirements generated by the operational scenario and the number of forces assigned. While imagery analysts and targeteers are available within the MIOC, dynamic ISR analysis support to dynamic targeting works best if the imagery analyst is collocated with a targeteer and has direct communication with COPS MDT watch standers. The TLAM cell provides TLAM dynamic targeting capability.

1. Maritime dynamic targeting chief.


3. Maritime dynamic targeting coordinator. Depending on the extent and nature of operations, more than one MDT coordinator may be needed and should include expertise in strike and surface warfare (SUW)/antisurface warfare.

4. Imagery analyst.

5. Targeteer/precision targeting workstation operator.

### 3.7.2.3 Points of Coordination

1. Internal:
   a. Current operations
   b. Future operations
   c. Current intelligence watch
d. Integrated air and missile defense cell

e. Tomahawk land-attack missile cell

f. Information operations cell

g. Knowledge management WG

h. Staff judge advocate

i. Logistics readiness center

j. Component LNOs.

2. External:

   a. Subordinate tactical commanders

   b. Joint force commander JFE

   c. Other components’ dynamic targeting cells

   d. Regional FIOC.

3.7.2.4 Inputs

1. Higher headquarters commander’s objectives, guidance, and intent, including TST matrix

2. Commander’s objectives, guidance, and intent, including MDT matrix

3. Joint target list

4. Enemy maritime order of battle

5. Restricted target list

6. No-strike list

7. Air tasking order/air plans


3.7.2.5 Outputs

1. Target nominations

2. Input to JIPTL.

3.7.3 Tomahawk Land-attack Missile Cell

3.7.3.1 Functions

The TLAM cell provides planning, coordination, and execution of deliberate and dynamic TLAM strikes and may include continuously manned watch stations during various phases of joint operations. The TLAM cell may include or coexist with a TLAM strike and mission planning cell (TSMPC) whose duties include mensuration of
target coordinates and development of mission libraries. The TLAM cell receives targeting tasking from the ATO or apportioned JIPTL or dynamic tasking, such as TSTs and MDTs, and creates strike packages for firing units to execute. If additional mission planning is required, the TLAM cell employs the organic TSMPC or other members of the planning organization federation, such as cruise missile support activities.

The JFMCC or MOC director should delegate tasking authority executive agency to the appropriate level within the fires element or TLAM cell, supported by robust standard operating procedures and verifiable checklists. Approval authority for both deliberate and dynamic strikes should be designated in writing. When the JFMCC retains TLAM-specific administrative roles, such as theater strike coordinator and TLAM tactical database manager, the TLAM cell will execute such duties on behalf of the JFMCC. The TLAM cell must coordinate within and across components throughout the targeting cycle to synchronize effects among warfare areas and deconflict airspace and scheme of maneuver. Ancillary TLAM cell duties may include representation in operational planning teams and liaison to adjacent component operations centers. The TLAM officer should also plan for SATCOM bandwidth with the N6 rep (COMMO) to ensure the Tomahawk strike network has correct coverage in the AOR, or alternate bandwidth.

**Note**

Current fleet practices vary, but some MOCs may have both a TSMPC and a TLAM strike execution cell; Not all MOCs will have both of these. The relationship between the TSMPC and TLAM cell might be peer-peer or senior-subordinate, depending on MOC organization.

### 3.7.3.2 Composition

1. Tomahawk land-attack missile officer
2. TLAM mission-planning officer
3. Assistant TLAM mission planning officer
4. Mission distribution system operator
5. Precision targeting workstation operator.

**Note**

Additional TSMPC manning is in accordance with Operation Planning Evaluation Group certification requirements.

### 3.7.3.3 Points of Coordination

1. Internal:
   a. Maritime dynamic targeting chief
   b. Current operations
   c. Targeting team
   d. Information operations cell
   e. Communications and information systems, N6, and/or COMMO (for SATCOM circuits)
   f. Maritime intelligence operations center
g. Logistics readiness center.

2. External: The MDT chief and other COPS watch standers assist the TLAM cell in coordinating dynamic TLAM targeting and mission requirements with external organizations.
   a. Planning organization federation
   b. CSG and ESG (firing unit selection)
   c. Air space control authority/JFACC (airspace deconfliction)
   d. Launch area coordinator
   e. Other components
   f. Firing units.

3.7.3.4 Inputs

1. Higher headquarters commander’s guidance and intent
2. Commander’s guidance and intent
3. Joint target list
4. Restricted target list
5. No-strike list
6. Airspace control order
7. Air tasking order
8. Joint integrated prioritized target list
9. Joint tasking message or 9-line (in case of call-for-fire)
10. Subordinate task force scheme of maneuver
11. Intel/imagery.

3.7.3.5 Outputs

1. Electronic or manual strike packages
2. Airspace control measure requests
3. Pre- and post-launch consolidated reports
4. Message to observer (in case of call-for-fire)
5. Collection requests
3.8 INFORMATION OPERATIONS CELL

NWP 3-13, Navy Information Operations; JP 3-13, Information Operations; and NTTP 3-13.1, Theater and Campaign Information Operations Planning, provide additional guidance on information operations.

Information operations is the integrated employment, during military operations, of information-related capabilities (IRCs) in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own. Adversaries employ similar strategies with regard to friendly forces in support of their goals and objectives. Potential adversaries also protect operational indicators from friendly sensors and are alert to friendly actions that appear unusual or deceptive. IRCs can isolate adversary resources, disseminate overt truth-based multimedia information, and support kinetic targeting, to create the desired effects. As an operation unfolds and the situation becomes increasingly fluid, IO objectives and tasks are modified to exploit success while protecting friendly vulnerabilities. It is essential that the IO cell fully participates in the assessment, planning, and execution processes and the MOC battle rhythm events to ensure integration and synchronization of IRCs.

Public affairs communicates information to the public. PA shall not be considered an IRC in this context, and IO does not integrate its employment. PA and IO shall, however, keep each other informed of its public information plans and activities. This enables them to deconflict efforts when necessary.

Information operations planners identify target audiences to influence C2 system targets with the corresponding desired effects, as well as the means of affecting them to support force operations.

3.8.1 Information Operations Cell Functions

IO creates effects in the information environment using IRCs. Each of these elements takes into account special or unique considerations during the planning process and employed to achieve desired effects. Individual capabilities are synchronized during planning with each other and with other aspects of an operational plan to achieve the commander’s objectives.

The IO cell lead coordinates IO matters, including providing support to various CFTs such as COPS, FOPS, MPG, MAG, targeting, ROE/RUF and collection management working groups, as required. This section identifies primary functions of the IO cell as they pertain to IO matters in current operations, plans, assessment, and targeting.

1. Principal functions include:
   a. The continuous planning, directing, monitoring, and assessing of integrated information-related capabilities in support of the commander’s goals and objectives
   b. The continuous shaping of the information environment, employing IRCs, forces, and concepts to achieve information superiority, resulting in operational advantage on the battlefield.

2. Support current operations:
   a. Direct activities in support of the current scheme of maneuver and to achieve information superiority.
   b. Synchronize and coordinate IRC with the overall operation. Coordinate with higher headquarters, other component or subordinate commands, and assigned or attached assets. Maintain an execution matrix.
   c. Monitor and continue coordination of IRCs across the range of operations (e.g., commander engagement during diplomatic meetings; perform as jamming control authority for planned communications electronic attack mission supporting site exploitation operations; adjust MISO product dissemination based on assessment reports; and participate in COPS dynamic targeting (maritime manager in JADOCS) to coordinate kinetic/nonkinetic dynamic fires).
d. Include IO-specific information in drafted FRAGORDs and SITREPs.

e. Monitor the theater information environment for local, transregional, or global reaction.

f. Monitor and recommend adjustment to collection plans.

g. Support military deception (MILDEC) planning.

h. Recommend information operations conditions (INFOCON).

i. Conduct liaison with joint military information support task force (JMISTF), if activated, and the electronic warfare coordination cell, as required.

j. In concert with AT/FP working group, conduct planning to protect the C2 system from cyberspace attack and intrusion.

k. Monitor and provide input to the joint restricted frequency list.

3. Integrate and coordinate IRCs into the campaign plan:

a. Participate in and co-lead, when appropriate, the planning process. Provide IO SMEs to planning OPTs during each step of the planning process.

b. Coordinate preparation of plans and orders that have influence objectives.

c. Recommend priorities for the employment of IRCs to generate IO-specific effects.

d. Coordinate with higher headquarters, other components, subordinates, and assigned or attached assets/units.

e. Request IO resources from HHQ to meet maritime IO objectives, as required.

f. Identify and develop MOE and MOP for IO activities.

g. Identify information requirements for the MIOC collection.

h. Recommend CCIRs.

i. Recommend essential elements of friendly information.

j. Identify critical information and promulgate to planners.

k. Utilize IO cell SMEs to support continuous IO staff estimates of supportability and risk.

l. Identify augmentation or reachback support requirements, through commander and HHQ, for action.

m. Provide operations security (OPSEC) assessment that identifies highest OPSEC risk area and proposed countermeasures.

n. Participate in targeting board and fires cell to prioritize, nominate, and deconflict targets and to provide alternatives to traditional kinetic methods of effecting targets. Recommend IRCs based on desired end state.
o. Participate and provide input to targeting process (nomination, intel gain/loss adjudication, prioritization, etc.)

p. Provide inputs to technical data collections used for precision targeting.

q. Determine collateral damage estimations (CDEs), secondary and tertiary effects, and undesired effects as a result of kinetic or nonkinetic actions, to include transregional and global implications.

r. Coordinate IRCs to support communication themes.

s. Assist in developing commander’s objectives, guidance, and intent as well as specific operational effects to generate or conditions to set for each phase or stage in consideration.

t. Identify friendly information-related critical assets for nomination to the critical asset list (CAL) and defended asset list (DAL).

u. Assist planners in assessing risk to mission and risk to force of losing capabilities from information-related assets and developing mitigation measures to reduce likelihood or severity to acceptable levels.

4. Conduct assessment:

a. Participate in operational net assessment.

b. Collect, analyze, and report IO MOE and IRC MOP data.

c. Assess the performance and operational effects of IO throughout the operation; recommend adjustments as required based on recognized opportunities and risk.

d. Prepare assessment reports that address political, military, economic, social, information, and infrastructure considerations.

e. Analyze foreign media.

f. Manage use of private sector intelligence, academia, and interagency responses in influence and IO-specific assessments.

g. Conduct a comprehensive comparison of target behavior throughout phases of operations.

3.8.2 Information Operations Cell Composition

The IO cell consists of the IO cell lead and personnel with expertise in the areas of planning for electromagnetic spectrum management operations, OPSEC, MISO, MILDEC, CO, SIGINT, CMO, and targeting. These unique skill sets, along with IO support, should be present or readily available to the IO cell. Information operations also may draw upon the expertise of intelligence, logistics, communications, public affairs/combat camera, staff judge advocate, special operations, and civil affairs. Additionally, there may be liaison officers from other components or subordinate units.

3.8.3 Points of Coordination

1. Internal:

a. Current operations and FOPS cells

b. Fires element
c. Maritime planning group
d. Logistics readiness center
e. Counterintelligence/HUMINT
f. All-source analysis and production
g. Meteorological and oceanographic cell
h. Battle watch captain
i. Red Cell
j. Liaison officer cell
k. Knowledge and information management WG
l. Collection manager
m. ROE/RUF working group
n. Fires element
o. Public affairs officer
p. Maritime air operations cell.

2. External (dependent on role of the commander):
   a. Strike group(s) information operations warfare commander
   b. Component commands
c. Commander, Tenth Fleet and subordinate commands/CTFs
d. Subordinate task forces and task groups
e. Coalition members
   f. Joint Information Operations Warfare Center
g. Joint Warfare Analysis Center
h. Electronic warfare coordination cell
   i. Joint military information support task force
   j. Military information support operations group
   k. Interagency working group
   l. National Security Agency
   m. Joint Communications Security Monitoring Agency
n. Central Intelligence Agency
o. Defense Intelligence Agency
p. Joint Spectrum Center
q. Joint Combat Camera Center
r. United States Cyber Command (CYBERCOM)
s. Higher headquarters IO organizations to include JFC Operations (J3)/Concept Development (J9), GCC J3/J9 and JCS J3/J39.

3.8.4 Inputs

1. Enemy order of battle (electronic, air, surface, and subsurface)
2. Intelligence products, including IPOE
3. Commander’s objectives and guidance from HHQ, including desired effects or conditions to set for each phase or stage as developed from the OPT during the planning process.
4. List of assets and forces available
5. Theater security cooperation plan
6. Maritime security cooperation plan
7. Joint target list, joint restricted frequency list, no-strike list, restricted target list
8. MOE/MOP
9. Public affairs planning and communication products
10. Master maritime attack plan
11. Staff estimates
12. Warning order
13. ROE/RUF
14. Higher headquarters OPLANs/OPORDs
15. Dynamic target lists (e.g., TSTs, maritime dynamic targets, high-value individuals, etc.).
16. All joint/HHQ IO guidance product.

3.8.5 Outputs

1. Inputs to update or refine commander’s objectives, guidance, and intent for deliberate and/or crisis action planning
2. Information operations plan and synchronization matrix
3. Inputs to plans and orders

4. Coordinated MILDEC, EMSMO, MISO, OPSEC, defensive cyberspace operations plans

5. Inputs to the fires element and targeting

6. Inputs to assessment and the intelligence collection plan

7. Inputs to JTL/JIPTL, NSL, RTL, TST, MDT/HVT/HPT, MTNL, MPTL, and JRFL, as appropriate

8. List of capabilities

9. Recommended CCIRs

10. INFOCON decision matrix.

3.9 KNOWLEDGE AND INFORMATION MANAGEMENT

The commander sets the tone for the entire command by establishing priorities for information requirements and dissemination. The commander defines what information is needed and how it should be delivered. Knowledge and information management (KM/IM) facilitates the command’s knowledge and information flow (internally, externally, vertically, and horizontally) processes to optimize and support the commander’s decision cycle. The structure of the MOC’s organization and its processes determine where information should flow but it should not be allowed to stovepipe information or impede information exchange. Effective KM/IM ensures timely, relevant, and prioritized information (processed data) is provided in an organized manner and useable format to the commander and MOC elements. In so doing, it facilitates the MOC’s ability to assess changing conditions, establish priorities, and execute the decision-making process. Effective management of mission-critical knowledge and information requires clear processes that are understood and practiced by staff members and leadership who will enforce KM/IM policies. A command’s organizational structure to enable effective KM/IM should include a designated KMO (see section A.4.1), a KIM WG, and a knowledge and information management board (KIMB). Some MOCs have additional KM/IM positions that support KM/IM efforts. These may include an information management officer (IMO) who may report to the MOC director or the N-6 director and/or a KM/IM cell that tends to report to the KMO.

3.9.1 Knowledge and Information Management Working Group

The KIM WG is the action officer group that supports the KIMB. It works to develops procedures and business rules that provide the rapid flow of information. Additionally, it coordinates all cross-functional and cross-organizational exchange of information in order to support the MOC processes. The KIM WG’s management of information and information flow reduces uncertainty and ambiguity, facilitating a clear understanding of the operational environment so that the commander can make critical decisions that lead to mission accomplishment.

3.9.1.1 KIM WG Functions

1. Recommend organizational structures that facilitate KM/IM within the command.

2. Identify role-based responsibilities for KM/IM tasks and product production.

3. Delineate business rules for information flow to and from organizations external to the MOC such as the higher headquarters commander, other component commanders, and their subordinates.

4. Coordinate information flow strategy to track, control, and fuse the vast amount of information used by the MOC, while optimizing the KM/IM infrastructure.
5. Tailor KM/IM processes to provide specific instructions on the handling of information within the MOC to ensure the availability of quality information throughout the staff.

6. Orchestrate KM/IM activities such that tactical- and operational-level requirements are clearly defined, planned for, and published in a timely manner.

7. Identify, facilitate, and refine the use of collaborative tools.

8. Provide process and policy recommendations.

9. Support the COS in management of the battle rhythm.


11. Develop the knowledge and information management plan (KIMP) for approval by the KIMB.

12. Provide requisite user training within each representative’s staff area.

13. Propose resolutions to emergent KM/IM issues.

3.9.1.2 KIM WG Composition

The working group is chaired by the knowledge management officer, or co-chaired by the KMO and the IMO (if one is assigned). The KIM WG is made up of KM/IM representatives from all the staff areas (N-codes as well as bureaus, centers, and cells) and should include principle stakeholders such as the CCIR manager, the RFI manager(s), and the foreign disclosure officer (FDO). The KIM WG should also include representation of subordinate and partner commands when they are involved in a specific operation.

1. Knowledge management officer

2. Information management officer, if assigned

3. KM/IM representatives from all command N-codes and appropriate MOC bureaus, centers, and cells

4. KM/IM representatives from subordinate and partner commands, when applicable

5. Principle stakeholders: CCIR manager, RFI managers, FDO.

3.9.1.3 KIM WG Points of Coordination

1. Internal:
   a. Communications and Information System Center
   b. All command N-codes and required MOC bureaus, centers, and cells.
   c. Knowledge and information management board.

2. External:
   a. Knowledge and information management organizations at supporting and subordinate commands
   b. Combatant commander or higher headquarters JIMB or KIMB.
3.9.1.4 KIM WG Inputs

1. Specific knowledge and information requirements from the N-codes and MOC CFTs
2. KM/IM directives
3. OPLAN/orders/CCIRs/planning guidance/commander’s guidance and intentions
4. New information exchange requirements/requests
5. Information exchange issues
6. Information about the current communications architecture that enable/restrict information exchange, sharing, and collaboration
7. Information on changes to the communications architecture that may impact information exchange/collaboration, impact of INFOCON, and information assurance
8. Assessment reports from intelligence or operations that provide updates on the current status of operational knowledge and information management and flow, performance of the battle rhythm, and I&W of any adversary activity or intention that may impact the collaborative information environment (CIE)
9. Results of latest KM/IM assessment.

3.9.1.5 KIM WG Outputs

1. Draft KIMP for KIMB approval
2. Recommended CFT and battle rhythm revisions to enhance the commander’s decision cycle and improve operational effectiveness
3. Feedback on the performance of collaborative tools
4. Draft OPTASK IM: Prior to exercise or major change of mission
5. Information management directives: As needed to immediately resolve technical issues and address changes required in business rules
6. Knowledge and information WG meeting minutes, as required
7. Resolutions to emergent KM/IM issues
8. Recommendations to N6 for adaptations/additions to the communication architecture to support KM/IM requirements.

3.9.2 Knowledge and Information Management Board

Typically, the KIMB acts as the focal point oversight and governance for KM/IM decisionmaking within the MOC (and overall within the command) to optimize effectiveness in the capture, sharing, and retention of mission-critical knowledge and information and to facilitate cross-command/cross-echelon collaboration in support of the commander’s decision cycle. In United States Pacific Fleet (USPACFLT), the implemented KM/IM processes have developed to enable the USPACFLT KIMB to serve as the focal point for KM/IM decisionmaking across all of the MOCs within their AOR.
3.9.2.1 KIMB Functions

1. Coordinate KM/IM problem resolution across the staff and assigned forces.

2. Provide KM/IM decisionmaking as needed.

3. Approve the KIMP.

4. Provide the KMO with recommended changes to the KIMP.

5. Ensure command collaboration tools (Web sites, portals, virtual collaboration tools) are monitored regarding storage and transmission capabilities.

6. Review and prioritize the requirements for developing, sharing, and transferring information internally throughout the MOC and externally to other stakeholders.

7. Assess compliance with MOC KM/IM policies, procedures, and business rules; recommend corrective actions as necessary.

3.9.2.2 KIMB Composition

The composition of the KIMB needs to be at a level senior enough to approve proposed policies and recommendations of the KIM WG and authorize resource allocation. Depending on the command’s structure, the COS, chief knowledge officer, or MOC director will chair the board.

1. Chief of staff

2. Chief knowledge officer, if assigned

3. Chief information officer, if assigned or the CISC director

4. MOC director

5. Knowledge management officer

6. Information management officer, if assigned

7. KIMB representatives of N-codes and established bureaus, centers, and cells (O6 and above).

3.9.2.3 KIMB Points of Coordination

1. Internal:
   a. Communications and Information Systems Center
   b. All N-codes
   c. PAO, IO, MIOC leads
   d. Common operational picture manager.
2. External:
   a. Functional component KMO/IMOs
   b. Interagency and NGO KMO/IMOs
   c. Coalition KMO/IMOs, as appropriate.

3.9.2.4 KIMB Inputs

1. Specific information requirements of HHQ, N-codes, MOC CFTs, and subordinate commands
2. KM/IM policies and directives
3. OPLAN/orders/CCIRs/planning guidance/commander’s guidance and intentions messages
4. New information exchange requirements/requests
5. Information exchange challenges/shortfalls
6. Recommendations from the KIM WG
7. Understanding of the communications architecture, the CIE, and any changes to either that may impact KM/IM processes.

3.9.2.5 KIMB Outputs

1. Approved KIMB, approved KIMB revisions
2. Approved resolutions to emergent KM/IM requirements
3. Approved OPTASK IM: Prior to exercise or major change of mission
4. KM/IM policies and directives
5. Knowledge and information management board meeting minutes, as required.

3.10 METEOROLOGICAL AND OCEANOGRAPHIC CELL

The METOC cell provides support for every warfare area across the range of military operations. As such, the METOC cell is represented in each planning team, as well as appropriate working groups and decision forums, while providing 24/7 support to COPS watch standers. The METOC cell directly supports subordinate commands where METOC personnel are not resident.

3.10.1 Functions

1. Provide METOC expertise to decision makers and operators so that they understand METOC effects on current and future operations/plans.
2. Coordinate and synchronize METOC support throughout the area of operations (includes reachback functions and data collection plans).
3.10.2 Composition

The METOC cell is composed of a small group of Navy METOC personnel at a level of manning which allows for the support required by COPs, FOPS, the MPG, various operational planning groups and the conduct of daily briefs to the commander and senior staff. The composition of the METOC cell will be driven by the scope and duration of the operation and consists of the following:

1. Staff oceanographer (director)
2. Deputy staff oceanographer (assistant director)
3. Up to five METOC forecasters and a chief aerographer’s mate
4. Other assistant, as needed.

3.10.3 Points of Coordination

1. Internal:
   a. Fires element
   b. Information operations cell
   c. Knowledge management officer
   d. Future operations cell
   e. Current operations cell
   f. Maritime planning group
   g. Maritime intelligence operations center
   h. Logistics readiness center.

2. External:
   a. Higher headquarters METOC officers
   b. Subordinate commander METOC officers
   c. Subordinate commands with no METOC capability
   d. International interagency liaison
   e. DOD METOC resources.

3.10.4 Inputs

1. Enemy order of battle (electronic, air, surface, and subsurface)
2. Operational environment sensing and survey plans/requirements
3. Commander’s objectives and guidance
4. List of assets and forces available and operational thresholds
5. Theater security cooperation plan
6. Maritime security cooperation plan
7. Joint target list, joint restricted frequency list, no-strike list, restricted target list
8. MOEs/MOPs
9. Public affairs planning and communication products
10. Master maritime attack plan/ATO
11. Staff estimates
12. Warning order
13. OPLANs/OPORDs
14. Operational meteorological and oceanographic data and products
15. Intelligence preparation of the operational environment.

3.10.5 Outputs

1. METOC briefings for commander
2. METOC annex for OPLANs/CONPLANs/OPORDs (Annex H)
3. Various AO METOC forecasts
4. METOC impacts on COPS
5. METOC impacts on FOPS
6. Climatology for long-range plans
7. METOC and survey requirements.

3.11 RULES OF ENGAGEMENT/RULES FOR THE USE OF FORCE WORKING GROUP

The ROE/RUF working group coordinates with the SJA’s staff to develop ROE/RUF during the planning process to meet operational objectives. The ROE/RUF WG reviews applicable standing ROE/RUF and recommends changes to the commander. The group also reviews supplemental ROE/RUF requests from subordinates and makes recommendations to the commander for acceptance if within the commander’s authority to approve or for submission to higher authority for approval. ROE/RUF are operational issues and must directly support the operational plan. ROE/RUF considerations must be incorporated into planning. Operations planning and ROE/RUF development are parallel and collaborative processes that require extensive integration and may need approval by the combatant commander for development and supplemental measures. See CJSI 3121.01B, Standing Rules of Engagement/Standing Rules for the Use of Force for U.S. Forces, for guidance on requesting supplemental ROE/RUF.
3.11.1 Functions

1. Interpret ROE/RUF and provide guidance.
2. Determine if supplemental ROE/RUF is required to support the operational concept of each proposed COA.
3. Draft supplemental ROE/RUF requests.
4. Include guidance for disseminating ROE/RUF.

3.11.2 Composition

1. Staff judge advocate representative
2. Maritime planning group representative
3. Future operations cell representative
4. Maritime intelligence operations center representative
5. Information operations cell representative.

3.11.3 Points of Coordination

1. Internal:
   a. Staff judge advocate
   b. Current operations
   c. Future operations
   d. Maritime planning group
   e. Information operations cell
   f. Knowledge and information management WG
   g. Maritime air operations cell
   h. Fires element.
2. External:
   a. Combatant commander J-3 and SJA
   b. Joint force commander J-3 and SJA
   c. Allied/coalition C-3 and SJA
   d. Other component/functional command operations and SJAs.
3.11.4 Inputs

1. Commander’s mission, statement of objectives, and guidance
2. Commander’s estimate of the situation, intent, and guidance, OPLANs/OPORDs
3. Higher headquarters OPLANs/OPORDs.

3.11.5 Outputs

1. Rules of engagement/RUF supplemental requests
2. Rules of engagement/RUF appendix to Annex C of the OPLAN
3. Rules of engagement/RUF cards
4. Rules of engagement/RUF translations to multinational forces or coalitions.

3.12 THE PROTECTION WORKING GROUP

The protection working group meets as required to review and discuss operational protection issues, including critical infrastructure protection (CIP); AT/FP; mine warfare (MIW); antisubmarine warfare; SUW; IAMD; and chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE), raised by the commander, the staff, planning teams, and major subordinate commands. Each principal staff section should be represented to provide an accurate intelligence, operations, facilities, and logistics assessment. The protection working group works closely with the IO cell to identify and protect priority equipment from physical attack by state and nonstate actors.

3.12.1 Functions

1. Serve as the commander’s primary body for coordinating protection issues.
2. Provide detailed plans and staff estimates to planning teams to assist with the development of plans and orders.
3. Determine risks to the mission during planning.
4. Recommend allocation of resources to mitigate risks.
5. Monitor and disseminate protection information throughout the command (threat levels and threat warnings).
6. Conduct protection vulnerability assessments to assist major subordinate commands with development of FP plans.

3.12.2 Composition

1. COPS representative
2. Maritime intelligence operations center representative
3. Logistics Readiness Center representative
4. Maritime planning group representative
5. Staff judge advocate representative
6. Information operations cell representative
7. Counterintelligence/HUMINT/FI cell representative
8. Surgeon
9. AT/FP officer
10. Protection-related subject matter experts, including these areas: mine warfare, antisubmarine warfare, surface warfare, IAMD, CBRNE.

### 3.12.3 Points of Coordination

As required.

### 3.12.4 Inputs

1. Commander’s and planning team guidance and intent
2. Maritime subordinate commanders’ input
3. Maritime intelligence operations center threat assessment
4. Intelligence preparation of the operational environment
5. Higher headquarters guidance and intent.

### 3.12.5 Outputs

1. Operation order protection staff estimates
2. Force protection plans
3. Protection matrixes to assist the staff with risk and threat management.

### 3.13 INTEGRATED AIR AND MISSILE DEFENSE CELL

The IAMD cell is the maritime commander’s (Navy component commander/numbered fleet commander/JFMCCs) primary planning and execution coordination conduit with higher headquarters, other components (AOC and Army Air and Missile Defense Command (AAMDC)), subordinate forces, and outside support agencies for IAMD mission requirements. If a subordinate commander, task force is designated as a maritime regional air defense commander (RADC), the IAMD cell assists the RADC by providing IAMD coordination.

Normally, the operational-level Navy commander delegates tactical control (TACON) of ships with IAMD capabilities and assigns planning and command functions to the commander, task force who has the preponderance of ships with IAMD capability. If activated and in place within the AOR, these functions would be assigned to a CTF IAMD, below.
OPCON of ballistic missile defense (BMD)-capable ships will normally remain under a maritime commander for several reasons:

1. Provides most effective asset management
2. Maximizes warfighting capacity and capability across all component commanders
3. Optimizes logistics support
4. Ensures asset protection and safety of navigation.

The nature of a BMD-capable ship must be carefully considered when delegating TACON. The stationing and combat systems requirements for conducting BMD may significantly limit the ship’s ability to conduct other warfare tasks. This limitation on a high demand, low density asset and the impact on other maritime missions must be accounted for during planning.

Since the BMD mission set is predominately a joint endeavor, MOC planners need to establish and communicate the maritime BMD input into existing joint planning processes. In addition, these joint planning processes must address the cross-CCMD BMD domain. It is not uncommon for a ballistic missile launch point to be in one geographic combatant commander’s (GCC’s) AOR and the target in another GCC’s AOR. The targeted GCC is normally the supported commander for BMD operations. JFCs must be able to coordinate across AORs to conduct effective BMD planning and execution. This includes coordinating network linkages that support ISR, C2 and planning data exchanges, and enabling collaboration and reach back with AMD agencies and commands. Once major combat operations commence, reachback may not be possible when fighting in a communications degraded environment. Subordinate commanders must understand the commander’s guidance and intent and execute their orders when communications with HHQ are no longer possible. The MOC IAMD cell conducting IAMD planning, and subordinate, tactical-level commands must work closely with their counterparts in adjacent theaters.

### 3.13.1 Functions

Maritime air and ballistic missile defense is a coordinated operational- and tactical-level process and requires the integration of inputs from the JFC, other component commanders (specifically through NALE at the CAOC and AAMDC), and subordinate tactical commanders. The IAMD cell role is to provide integrated maritime air and missile defense capability to the JFC in support of the operational plan while providing subordinate commanders a clear path and process for providing recommendations and adjustments. Responsibilities include:

1. Prepare maritime IAMD input to the area air defense plan, joint air operations plan, air control order, and SPINS, DIMs/weekly intentions, and directive messages, MILDEC, and emission control plans.
2. Represent the commander in the CAL/DAL development process and on reprioritization boards.
3. In accordance with the AADP, communicate changes in threat warning conditions and weapons control status to subordinate commanders.
4. Provide IAMD ISR requirements to the MIOC for generation of RFIs, production requests, collection requirements, PIRs, etc.
5. Plan, monitor, and assess IAMD operations and provide the maritime commander recommendations for directing maritime force AMD operations.
6. Assist with RADC/sector air defense commander (SADC) support to the AADC.
7. Serve, when IAMD planning and command functions have not been assigned to a subordinate CTF, as liaison to the AADC for IAMD planning and execution.
8. Request IO support for effects through the joint coordinating body in theater.

9. Provide maritime IAMD input to the MTNL/MPTL/TST list/MDT list.

10. Coordinate IAMD asset sustainment requirements for logistics and maintenance.

11. Maintain oversight of the maritime commander’s IAMD exercise program.

12. Conduct asset management in accordance with United States Strategic Command instruction 538-1, BMDS Description and Asset Management, protocols.

13. Provide command center IAMD watch standers as required.

14. Provide communication, network, link, information exchange requirements/mission-essential information, requirements, etc., to MPG, FOPS, CIS.

**Note**

Conducting BMD planning in coordination with other MOC and CSG operations can be challenging. At a minimum, planners should reference TM 3-01.1-08, Maritime Integrated Air and Missile Defense (IAMD) Planning Guide, and consult applicable Aegis Tactical publications such as TM 3-01.3.09, Aegis BMD Baseline 3.6.1 Core Tactics.

3.13.2 Composition

The IAMD cell is tailored to meet mission requirements. If an NCC/numbered fleet commander has an enduring IAMD mission, the IAMD cell will require one or more 24/7 watch stations. During planning evolutions, members of the IAMD core team provide IAMD expertise to the OPTs, MPG, operations centers, crisis action team, or other CFTs.

Maritime commanders may choose to establish a task force IAMD. Task force IAMD is a functionally based Navy organization to which the numbered fleet commander, who may be the JFMCC, assigns a CTF IAMD with selected planning and execution authorities. CTF IAMD provides a standardized C2 layer between the numbered fleet commander and subordinate maritime commanders focused on tactical-level missions. CTF IAMD is intended to fulfill several distinct roles. First, CTF IAMD is the primary maritime IAMD planning element. The CTF participates in development of joint AMD plans and refines those plans for execution in the maritime environment. CTF IAMD provides the JFMC with IAMD asset allocation, mission prioritization, and stationing recommendations. Secondly, during execution, CTF IAMD may be given TACON of BMD-capable assets tasked with conducting long-range surveillance and tracking or BMD surface action group operations. Finally, CTF IAMD may act as a RADC. In absence of a TF IAMD, the IAMD planning cell will be responsible for all IAMD/BMD planning tasks and will oversee TF IAMD planning.

3.13.3 Points of Coordination

1. Internal:
   a. Current operations
   b. Future operations
   c. Maritime planning group
   d. Fires element targeting team
e. Maritime air operations cell
f. Meteorological and oceanographic cell
g. Red Cell
h. ROE/RUF working group
i. Maritime intelligence operations center
j. Maritime assessment group
k. Information operations cell
l. Logistics readiness center
m. Protection working group fleet command representative
n. Communications systems AMD planner
o. Joint interface control officer.

2. External:
   a. AADC
   b. RADC or SADC
c. Subordinate commanders
d. Other agencies (Navy Air and Missile Defense Command (NAMDC), AMD planning facilities, Missile Defense Agency)
e. Other MOCs, including supporting coalition or Allied operations centers
f. Other component commanders AMD planners through established CCMD working groups, conferences, virtual environments, or other designated means.
g. Cross-CCMD organizations through CCMD working groups, cross-CCMD joint planning teams, and decision boards
h. Deputy area air defense commander.

3.13.4 Inputs

1. Relevant OPLAN/CONPLAN/OPORDs/FRAGORDs
2. CAL/DAL
3. Area air defense plan
4. ROE/RUF
5. Operational general (message)/OPTASKs
6. ATO/SPINs

7. Intelligence preparation of the operational environment

8. Joint integrated prioritized collection list

9. JIPTL/MAAP/MPTL/MTNL

10. Combat identification matrix

11. Battle damage assessment reports related to AMD targets, ballistic missile sites, or support infrastructure

12. Indications and warning and other intelligence reports affecting AMD.

### 3.13.5 Outputs

1. AMD input to the JAOP, AADP, ATO and SPINS

2. Recommended modifications to the CAL/DAL

3. Recommended changes to threat warning conditions and weapons control status

4. AMD daily intentions message or commander’s tactical guidance inputs

5. Recommended PIRs in support of AMD

6. Target nominations for MPTL/MTNL/TSTs/MDTs

7. IPOE support products required for AMD planning or assessment

8. AMD asset sustainment requirements

9. Operational protection requirements

10. OPORD annex/EXORD input

11. Spectrum management and command, control, communications, computers, and intelligence requirements

12. Final AMD C2 degradation plan

13. AMD OPTASK.

### 3.14 SPACE SUPPORT WORKING GROUP

The space support working group provides support to warfare areas, planning teams, and decisions forums to leverage space force enhancements in the functional areas of intelligence, surveillance, and reconnaissance; missile warning; environmental monitoring; satellite communications; and space-based positioning, navigation and timing. Space support is a rapidly evolving dimension of operations and has varying degrees of applicability in different AORs. The space support working group’s primary contributions will be the identification and integration of space enhancements during the planning process and managing space effects during operations. The space support working group will be formed and tailored as needed to meet individual MOC mission requirements and will most likely include reachback support from Commander, Tenth Fleet.
3.14.1 Functions

1. Build and maintain space situational awareness to include: systems status, planning support, space weather impacts, space support to maritime operations, and specific mission.

2. Build, maintain, and monitor space intelligence items to include: Blue and Red order for battle for space and awareness/incorporation of satellite vulnerability data.

3. Develop and distribute tailored space effects packages (SEP) to assigned forces based on Naval Network Warfare Center (NNWC) space cell global SEP.

4. Provide reachback support for assigned forces to include: space-related AOR events, coordination with National agencies for tailored support, and coordination with other component commanders or higher headquarters.

5. Generate, coordinate, forward, and track space support requests for units or supporting maritime plans and operations.

6. Assist with fleet training and incorporation of naval force space mission requirements into exercises.

7. Ensure space-based capabilities and critical vulnerabilities that affect maritime forces are included in the deliberate planning process (OPLAN/CONPLAN) so that space requirements are appropriately integrated into each phase of the maritime commander’s operational plans.

8. Identify space expertise augmentation requirements for the MOC during exercises and crisis.

3.14.2 Composition

1. Maritime operations center space operations officer

2. Space plans officer

3. Maritime intelligence operations center representative (collections manager)

4. Meteorological and oceanographic cell representative

5. CISC/NCCC representative(s) (joint interface controller officer, or spectrum manager)

6. Other assistants, as needed.

Note

Not all MOCs will have or require a MOC space operations officer or space plans officer on staff. This expertise may be augmented by Reserve support and/or reachback support from Commander, Tenth Fleet as needed to fulfill mission requirements.

3.14.3 Points of Coordination

1. Internal: All MOC CFTs

2. External:
   a. Higher headquarters, space coordinating authority, director of space forces
   b. Other component commands
c. Other MOCs

d. Subordinate command space operations officers

e. Supporting commands (e.g., NNWC)

f. Other Government agencies (OGAs).

3.14.4 Inputs

1. Enemy order of battle (space, counterspace, space support infrastructure, and C2 network)

2. Knowledge of assets and forces available

3. Commander’s objectives and guidance from higher headquarters

4. NNWC global SEP

5. Theater security cooperation plan

6. Maritime security cooperation plan

7. Joint target list, no-strike list, restricted target list

8. Master maritime attack plan

9. Public affairs planning and communication products

10. National intelligence support plan

11. Theater J–2 ISR strategy

12. Staff estimates

13. Warning orders

14. Higher headquarters OPLANS/OPORDs

15. CISC/NCCC reports and requests.

3.14.5 Outputs

1. Space impact briefings for commander

2. Maritime requirements for space support integrated into OPLANs/CONPLANs/OPORDs

3. Coordination of subordinate space support requests

4. operation task space supplement.

3.15 COMMAND AND CONTROL OF COMMAND AND CONTROL WORKING GROUP

Commands/joint force maritime component commanders may find utility in creating a command and control of command and control working group (C2C2WG) as part of their standard MOC battle rhythm. A C2C2WG develops procedures and business rules that coordinate the execution of the roles and responsibilities of the C2 of
C2 watchstanders. The C2C2WG also coordinates the information exchanges between departments and establishes processes capturing best C2 of C2 practices. The C2C2WG also coordinates with the KIM WG on specific C2 of C2 cross-functional information exchanges to support MOC processes. During normal operations, the C2C2WG supports the boards, bureaus, centers, and cells and MOC planning groups. During heightened operations, members of the C2C2WG or MOC B2C2 may initiate a C2 of C2 OPT. See appendix D and TM 3-32.3-12, Command and Control of Command Control, for more information on command and control of command and control philosophies.

3.15.1 Functions

1. Conduct initial alignment of C2 of C2 apparatus to commander’s priorities. Alignment updates/modifications are made as required due to branches, sequels, degradation, denial, and intrusions.

2. Review C2 of C2 watch officer situation reports.


5. Facilitate the coordination of MEI across the command.


7. Coordinate with other CFTs and OPTs as required.

3.15.2 Composition

1. Staff Officer from N3 serves as chairman of C2C2WG

2. Core Members (by functional area):
   a. Current operations
   b. Intelligence
   c. Information operations
   d. Communications and information system
   e. Knowledge and information management.

3. Supporting Members:
   a. Science advisor
   b. Warfighting assessment and readiness
   c. Future plans
   d. Future operations
   e. Public affairs
   f. AT/FP
   g. Logistics.
3.15.3 Roles and Responsibilities

1. Chairman:
   a. Facilitates one C2C2WG per month during phase zero or as needed with increasing frequency for phases 1, 2, and 3
   b. Serves as decision point regarding approaches to key C2 of C2 issues, policy changes, and process changes
   c. Assigns action within C2C2WG.

2. Core Members:
   a. Attendance by core members is required.
   b. Develop C2C2WG agenda items.
   c. C2 of C2 action officer provides agenda, session scheduling, summaries and action items.
   d. Represent functional areas and directorates.
   e. Advocate compliance with C2 of C2 concept and initiatives.

3. Supporting Members:
   a. Participate in C2C2 WG sessions as needed
   b. Represent functional areas and directorates.

3.15.4 Inputs

1. Significant events since last meeting
2. Subordinate commander’s intentions for next 72 hours

3.15.5 Outputs

1. Recommended CFT and battle rhythm revisions
2. Situational awareness for all new watchstanders and commander’s intent
3. Personnel qualification standards for C2 of C2 watch officers
4. Preplanned responses for systems/applications, networks, and transport
5. C2 of C2 requirements for comptroller.
CHAPTER 4

Logistics

4.1 LOGISTICS AT THE OPERATIONAL LEVEL OF WAR

NWP 3-32, Maritime Operations at the Operational Level of War, provides a good overview of operational level of war sustainment. Two sentences in the operational functions/sustainment paragraph summarize the crux of the MOC logistics focus: “Operational logistics links tactical requirements to strategic capabilities to accomplish operational and tactical objectives. The NCC, Navy forces (COMNAVFOR) is responsible for planning, coordinating, and supervising operational logistics.” Note the absence of the words “performing logistics,” which is the function of tactical and, to some degree, the strategic logistics forces.

Logistics is a primary contributor to the following key MOC functions:

1. Command and Control: The MOC must provide coherent direction and synchronize, in time and space, logistics functions, as well as the allocation and use of operational-level assets in support of operations. As with all command functions, logistics command and control is exercised by the commander.

2. Operational Planning: The MOC must be able to develop COAs, identify key logistics supportability of those COAs, assess the logistics status within the area of operation, calculate logistics estimates, identify shortfalls or gaps, evaluate resource sufficiency, and address concerns/issues. The ability to quickly develop a concept of logistics support with specific logistics support options for the COAs will be critical to the success of an operation.

3. Support of the Operation: The ability to track ongoing operations ensures changes can be made to address problems before they occur.

Logistics must be considered an equal and valued participant at all times in operational planning, which may require a mindset shift for the N4, the organization, and MOC counterparts. Logistics directorate or logistics representatives must be considered full-time participants in CFTs, OPTs, and commander’s decision briefs, rather than on call participants; the latter approach risks courses of actions that are not supportable logistically. The entity within the MOC that advises the commander on the best way to support mission success and coordinates support of the approved operation is the logistics readiness center.

Note

If the MOC is in a communications denied or degraded environment, the loss of unclassified network access would impact Web-based ordering systems to defense and commercial vendors, as well as impact global logistics status tracking capability. The greater the duration, the greater the impact on logistics command and control. LRCs should develop approved preplanned processes with supporting commands that are activated during typically assigned missions and OPLAN phases under well-defined levels of communication degradation.
4.2 LOGISTICS READINESS CENTER

4.2.1 Logistics Readiness Center Overview

All logistics efforts support mission accomplishment and are ultimately the responsibility of the commander. To exercise more effective commander and control, the commander must have visibility of logistics requirements and provide visibility of capabilities, requirements, and assigned priorities. This visibility allows the commander to make decisions regarding the effective allocation of scarce, high-demand resources. Additionally, command and control facilitates the integration of logistic operations with other warfighting functions so that the commander’s time for planning, decision, execution, and assessment is optimized. The core LRC functions common to almost all missions include the ability to plan, coordinate, and integrate operational- and theater-level logistics to support movement, maneuver, force application, and the sustainment of operating forces. Coordination and unity of effort between the LRC and other key logistics supporting staffs and commands providing logistics resources and support is the most critical aspect to effectively controlling and executing logistics support at the operational and tactical level of war. The commander will task-organize subordinate forces to support the assigned mission.

The LRC is responsible for making sure the force is supported logistically and that future contemplated operations are logistically feasible and supportable. Preparation for applying logistics expertise to the commander’s decision cycle begins with matching manpower to mission. Logistics encompasses a large range of discreet skills that may be needed for some missions and not others. Mission manning must be planned to support the full range of logistics skills, potential split-staff or even 24/7 operations, and continuation (or delegation) of man-train-equip and other higher headquarters tasking. The problem is exacerbated when the MOC is required to perform joint roles; coordination with other Service components or functional component commanders may require some expertise outside the maritime norm. The planned breadth and depth of the LRC for normal and routine operations, as well as required AMD/joint manning documents augments for likely missions, should be carefully considered and planned out to cover the wide range of functions listed in the paragraphs below before a contingency occurs. Carefully examine likely missions, analyze skills and experience of augments for best-value assignment within the LRC, and add billets to the manning documents, if appropriate. With prior mission analysis conducted and proper controls in place, execution involves activation of augment agreements already in place. If a firm augment source cannot be developed in advance for specific billets, analyze the risk to MOC mission and mitigate those risks over time with Service or Joint higher headquarters assistance.

4.2.2 Logistics Readiness Center Organization and Functions

The LRC supports the commander’s decision cycle through a sustainment and services cell, a readiness cell, and a logistics plans cell. It is through these key cross-functional cells that the LRC supports the commander in the functional areas of logistics, specifically supply; general services; distribution; maintenance; contracting requirements; ordnance; petroleum, oils, and lubricants; transportation; civil/contingency engineering (construction) and facilities; mortuary affairs (MA), and host-nation support (HNS). Force sustainment requires a high degree of coordination between Service components and, where required, DOD agencies. The LRC supports both the planning and execution oversight of logistics and provides the structures and procedures that the MOC needs to exercise logistic authority and responsibilities in an effective and well-coordinated fashion.

MOCs have varied mission sets and manning profiles. The deputy chief of staff/chief of staff logistics organizes their personnel within the LRC structure from both administrative span of control and logistics task performance perspectives. All personnel in the LRC typically work either within one of the cells or directly for the LRC leadership. All LRC personnel, whether functional experts or generalists, must be effectively used to support logistics monitoring, reporting, and planning efforts for Title 10 responsibilities and across all mission planning time horizons as set within each MOC for COPS, FOPS, and FUPLANS. Figure 4-1 shows this matrix support concept. While the following LRC construct described in figure 4-1 is not prescriptive, it offers a model based on effective practices observed in MOC operations and exercises.
When operational tempo dictates, the LRC becomes a 24/7 organization and becomes the focal point for coordinating and providing guidance relating to all logistics issues impacting maritime operations in the assigned AO.

Overall LRC responsibilities include:

1. Establish and maintain essential logistics communications with HHQ, other MOCs, subordinate commanders, operational units, and, when required, supporting Combat Support Agencies (CSAs), including Defense Logistics Agency (DLA), United States Transportation Command (USTRANSCOM), and the USTRANSCOM subordinate operational commands of Military Sealift Command (MSC), Air Mobility Command (AMC), and the Surface Deployment and Distribution Command (SDDC).

2. Participate in CFTs where logistics may directly impact operations, including COPS and FOPS. LRC participation in events and planning efforts led by FUPLANs should be under the purview of the Logistics Planner and the Plans cell.

3. Conduct operational-level collaboration and coordination for effective planning and management of operational-level logistic efforts. Where formal guidance to subordinate units is required, collaboration and coordination should be followed up with formal orders released from the COPS/FOPS cell.
4. Keep HHQ informed of the logistic readiness and potential shortfalls through submission of logistic reports, bulk petroleum contingency reports, and munitions reports, as appropriate.

5. Coordinate with HHQ and major supporting commands to resolve logistics shortfalls and limitations.

6. Ensure logistics communications between and amongst subordinate commands and supporting commands function properly and serve to support the overall coordination and collaboration between logistics providers and tactical operators.

7. Compile logistic inputs from subordinate and component commands for the commander’s SITREP.

8. Assess the effectiveness of logistic support, including distribution and allocation, level of supply, salvage, captured materiel, local acquisition of supply and services, and inter-unit cross-leveling.

9. Provide guidance and oversight for subordinate units’ logistics support operations.

10. Coordinate the transition of logistics operations between operation phases.

11. Coordinate common items support for all assigned, allocated, apportioned, and attached forces.

12. If appropriate, advise the commander of the areas of inter-Service support agreements, lead Service agreements, directive authority for logistics (if authorized by the CCDR), and executive agent agreements.

13. Where appropriate and authorized by HHQ, coordinate coalition, interagency, and HN support requirements across the ROMO.

Setting the LRC up to succeed requires careful balancing of functions with the available manpower and experience available.

4.3 SELECT LRC LEADERSHIP ROLES

4.3.1 Senior Logistics Officer/LRC Director

For numbered fleets, the senior logistician is both the ACOS for Logistics (N4) and the LRC director. For Commander, United States Fleet Forces Command and Commander, United States Pacific Fleet (COMUSPACFLT) the LRC director is a specific position assigned under the N4. The LRC director is responsible for ensuring all operations can be sustained and supported until concluded. The LRC director ensures personnel are properly trained, maintains awareness of ongoing and anticipated operations, and maintains a focus on the capacity, responsiveness, and effectiveness of logistics support of assigned, allocated, apportioned, and/or attached units. From a MOC organizational standpoint, the LRC director, along with other MOC logisticians, will participate in the battle rhythm events in support of the commander’s decision cycle.

The LRC Director should keep in mind that the seam between FUPLANS and FOPS is critical to successful mission execution. He or she must ensure that the logistics planner and the LRC chief are trained in transitioning a commander-approved plan from FUPLANS or FOPS for development into mission-type orders and subsequent execution by COPS. The LRC director must clearly define the responsibilities of their LRC chief and logistics planner across the spectrum of LRC responsibilities, normally in an SOP, so logistics products and SA developed by the LRC optimally support the commander’s decision cycle and the battle rhythm.

4.3.2 Logistics Planner and the Logistics Plans Cell

The logistics planner and the logistics plans cell are generally focused on FUPLANS and/or FOPS planning time horizons set by the commander, which, broadly speaking, includes the preparation of mission plans for the commander’s approval and development into a CONOPS. The logistics planner uses the CONOPS to develop a concept of logistics support which subordinate units will use to support the operation and the LRC will monitor.
The Navy planning process (NPP) organizes planning procedures into six steps: mission analysis, COA development, COA analysis (wargaming), COA comparison and decision, plans and orders development, and transition. The result of the NPP is a military decision that can be translated into a directive such as an OPLAN or OPORD. The products created during the NPP can and should be used during subsequent planning sessions (including in FOPS OPTs) when time may not be available for a thorough revision and where existing factors have not changed substantially. For more detail on the NPP, refer to NWP 5-01.

Staff estimates are essential throughout planning, because they ensure that proposed COAs are suitable, acceptable, and feasible from each functional perspective. Development of the logistics staff estimate is the logistics planner’s responsibility, but since these estimates cover all facets of logistics, they must draw upon the full resources of the LRC in accomplishment. Staff estimates form the basis for supporting annexes and appendixes of an OPLAN or OPORD and are continuously updated as the situation or conditions within the operational environment change.

The logistics planner(s) plays a unique and important role within the staff process that helps prepare the Commander to make well-informed decisions. A qualified logistics planner has skills not inherent in any Navy career path. In most cases, the LRC director should dedicate these limited resources to mission-planning efforts.

4.3.2.1 Functions

Participate in the staff planning process in operational planning teams from the beginning of the process, analyzing logistics support capabilities required for each COA under consideration.

1. Participate in the IPOE development and mission analysis.

2. Develop, analyze, and compare logistic support options for each COA developed by the planning teams. Ensure the commander’s intent, guidance, and mission effects are logistically supportable through COA development, COA analysis (including wargaming), and COA comparison.

3. Plan for support of multinational forces, IGOs, OGAs, and NGOs, if required.

4. Develop movement plans for intermediate and forward support, dispersal, evacuation, and redeployment sites. Establish an organizational infrastructure to support redeployment actions.

5. Prepare input for the TPFDD. Monitor the logistics elements of TPFDD movement to ensure proper integration flow into the AO.

6. Plan and manage the logistical aspects of reconstitution and redeployment of maritime units for follow-on missions.

7. Coordinate pre-deployment planning for the provision of necessary maintenance personnel, facilities, support equipment, materiel, and services. Integrate maintenance considerations in operational planning activities, ensuring that the maintenance planning rhythm supports the commander’s battle rhythm.

8. Plan appropriate civil engineer support.


10. Plan the distribution of materiel and services in support of contemplated operations.

11. Plan and execute of technical and management functions for the mortuary affairs program applicable to the maritime component.

12. Develop a deployment location drawdown plan. Ensure drawdown priorities and actions are fully integrated with the redeployment TPFDD and are accomplished prior to departure.
13. Inform the N4 of planning progress and logistics recommendations and provide the OPT/COA leads with logistics estimates and feasibility assessments.

14. Develop the logistics staff estimate, including assessment of the logistics capabilities in and the characteristics of the area of operations.

15. Interpret existing plans and assist preparation of new OPLANs, CONPLANs, and other formal orders (e.g., FRAGOs, WARNORDs, EXORDs).

16. When required, oversee the development of the logistics annex and appropriate sections of formal orders.

17. Within the guidelines established by the HHQ commander, recommend priorities for the allocation of logistics resources among assigned forces within the AO.

4.3.2.2 Points of Coordination

1. Internal to the MOC:
   a. Maritime intelligence operations center’s intelligence planners
   b. Maritime operations center’s FCC, FOPS cell
   c. Maritime planning group, JOPES cell, and maritime assessment group
   d. Health service support cell
   e. Staff judge advocate.

2. External to the MOC:
   a. Combatant commander Logistics (J–4)
   b. Joint task force commander J–4
   c. Commander, logistics task force (CTF), if assigned
   d. CCDR joint deployment and distribution operations centers (DDOCs), if appropriate and authorized by higher headquarters
   e. NAVSUP Global Logistics Support (GLS)
   f. Appropriate fleet logistics centers (FLCs)
   g. Defense Logistics Agency (DLA) theater representative
   h. USTRANSCOM (if appropriate and authorized by HHQ)-Military Sealift Command, Air Mobility Command, Surface Deployment and Distribution Command
   i. Medical organizations (fleet hospital, etc.).
   j. Supervisor of salvage
   k. Subordinate command N4s
   l. Host nation agents, NGOs, CMOC, and/or civil-military cooperation center
m. Joint/multinational logistics boards and centers

n. Combatant commander service component (e.g., United States Army Forces North)/functional component (e.g., JFACC) command x–4 (e.g., N-4, J-4, S-4, etc.).

4.3.2.3 Inputs

1. OPLANs, CONPLANS, OPORDs and other formal orders
2. Operational planning team planning products
3. Operational Report 5 feeders
4. Defense Readiness Reporting System-Navy
5. Logistics coordination board/logistics working group action items/minutes
6. Infrastructure capacity and capability estimates
7. RFF, RFI, RFC.

4.3.2.4 Outputs

1. Logistics analysis by operational phase, resulting in a Logistics Estimate.
2. Intertheater logistics SITREP, both formal (required, periodic) and informal (as required based on tactical situation).
3. Concept of logistics support to support the concept of operations.
4. Where required, Annex D (Logistics) and Annex W (Operational Contract Support) to OPLANs/OPORDs.
5. Where required, input to OPLAN/OPORD base plan and annexes, particularly Annexes A (Task Organization), C (Operations), J (Command Relationships), P (Host-nation Support), and R (Reports).
7. Logistics portion of TPFDD.
8. Medical evacuation plans (in coordination with the fleet surgeon and/or health service support cell).
9. Maintenance plans.
10. RFF/RFI/RFC.

4.3.3 LRC Chief

The LRC chief (or, if not adequately manned for one, the deputy LRC director) is generally focused on the day-to-day efforts of the LRC, managing the time horizons of current operations and, as directed by the LRC director, working with the logistics planner to maintain alignment between future operations and event plans beyond the COPS/FOPS time horizon.
4.3.3.1 Sustainment and Services Cell

The LRC sustainment and services cell plans and directs logistics operations for all classes of supply in the operating area by establishing policies and procedures and identifying unit sustainment requirements, resources, and priorities. The sustainment and services cell is also responsible for establishing the contracting and procurement policies and guidelines in the theater of operations. The sustainment and services cell coordinates the establishment of resupply and support options for key classes of supply, monitors ongoing sustainment operations (including maintenance and engineering support), identifies resupply-related problems and critical items in short supply, and resolves supply support issues. This cell is comprised of sustainment and services sections which implement policies and procedures. The sustainment cell’s primary responsibility is to obtain the necessary support and to establish channels to resupply each unit within the AO. They keep the LRC apprised on fuel capabilities and limitations. Depending on manning and mission, the sustainment cell may encompass supply, petroleum, ordnance, transportation, maintenance, engineering, mortuary affairs, contracting, and procurement sections.

4.3.3.1.1 Functions

1. Assist in planning the opening function, including reception, staging, onward movement, and integration (RSOI).

2. Provide a wide range of supply and transportation support critical for peacetime support, crisis response, FHA/DSCA/response, and combat service support missions.

3. Establish policies, procedures, priorities, and oversight of critical/cross-Service/common-use materiel. Consider:
   a. Cross-Service use of maintenance facilities
   b. Distribution of selected repair parts
   c. Resupply and distribution of conventional ammunition
   d. Resupply and distribution of fuel
   e. Supply items.


5. Establish policies, procedures, priorities, and oversight of mortuary/decedent affairs in concert with the joint mortuary affairs officer, if so tasked.

6. Establish policies, procedures, priorities, and oversight of maintenance and repair.

7. Establish policies, procedures, priorities, and oversight of vertical and horizontal contingency engineering.

8. Review and take appropriate action on reports related to sustained combat support required by applicable instructions, regulations, manuals, and directives for the AO.

9. Coordinate and expedite HNS including, but not limited to, equipment, facilities, personnel, and services through the appropriate channels to support operations.
4.3.3.1.2 Supply Section Functions

The supply section provides the MOC LRC director with the ability to coordinate, plan, and direct support options for general supplies for sustaining theater forces throughout a theater campaign or joint operation. This includes the allocation of supplies (except petroleum and ordnance, which are controlled by other sections), sourcing, storage, movement, distribution, and disposition of materiel. The role of the supply section is to track the allocation and distribution of supplies to units and recommend/direct adjustments to meet operational requirements in the area of operations. The supply section is also responsible for ensuring that theater stockage levels are sufficient to support the units assigned based on the expected or estimated intensity of operations and may include the need to work with other military Services or a host nation to ensure that all sustainment options have been considered in sustaining the tempo and continuity of operations throughout the campaign or mission. Specific responsibilities include:

1. Determine supply equipment requirements to support the AO.
2. Coordinate with the Service elements to establish supply support within the AO.
3. Respond to all validated sourcing requests for spares. Establish and coordinate resupply channels for deploying units. Perform follow-up actions, initiate command supply assistance requests, review supply difficulty reports on requisitions/shipments, and resolve any supply-related issues.
5. Anticipate, and where feasible, forecast logistics requirements and ensure resources are sufficient to support these requirements during all phases of the operation.
7. Coordinate and prioritize supply support for other operating locations within the AO.
8. Determine pre-positioned stockage levels for critical supplies and determine appropriate pre-positioned storage locations within the AO. As a principle coordinator for the commander, maintain visibility of available resources and assess the adequacy of combat support activities to meet operational requirements.
9. Monitor and coordinate with HHQ and supporting major commands to resolve equipment and personnel shortfalls and limitations.
10. Monitor critical supply support capabilities, resolving problems and expediting resource movement.
11. Determine the location and number of pre-positioned war reserve materiel stocks (PWRMs), stockpiled materiel, and equipment to include all classes of supply.

4.3.3.1.3 Petroleum Section Functions

The mission of the petroleum section is to plan, coordinate, integrate, and synchronize operational and theater level fuel support and enable the execution of operations by providing policy, guidance, assistance, and oversight to fuel operations in the AO. Specific responsibilities include:

1. Assist the logistics planner in developing fuels support options for each COA developed by the planning team.
2. Assist the logistics planner in determining fuels support equipment required to support OPLANs and CONPLANs; prepare these requirements in the JOPES format for inclusion in the TPFDD.
3. Assist the logistics planner in preparing host-nation base support assumptions, and prepare estimates of fuels support required for HN.

4. Monitor and coordinate corrective action to deficiency reports and fuels shortfall; take action to eliminate limitations and provide inputs to ensure fuels support.

5. In concert with the CCDR joint petroleum office and/or the subarea petroleum offices and/or higher headquarters, establish policies, procedures, priorities, and oversight of petroleum management and resources in the AO.

6. Coordinate supply of common bulk petroleum and packaged petroleum products to subordinate commands.

7. Where required, coordinate procurement of bulk petroleum for service components with DLA energy and FLC fuels officers.

8. Recommend allocation and apportionment of petroleum products and facilities to the commander.

4.3.3.1.4 Ordnance Section Functions

The mission of the ordnance section is to plan, coordinate, integrate, and synchronize operational- and theater-level ordnance supply and capability. Specific responsibilities include:

1. Coordinate the sustainment and resupply of ordnance for the force.

2. Direct and monitor compliance with the business rules associated with the Joint Staff munitions report.

3. If authorized, populate the due-ins portion as Service component.

4. Compute, develop, and source munitions requirements for assigned forces.

5. Assist the logistics planner, maintaining close liaison with other MOC cells during operational planning.

6. Establish, coordinate, and monitor munitions movement requirements for channel airlift, maritime shipping, and rail or line haul.

7. Perform follow-up actions and resolve any munitions shortages.

8. In support of the logistics planner, submit the munitions OPORD inputs to the logistics plans cell.

9. Establish policies, procedures, priorities, and oversight of critical munitions.

10. Develop component estimates of ammunition resupply requirements.

11. Recommend and establish allocation priorities and adjust them as directed by the commander.

12. Monitor consumption rates of critical materiel and ensure critical materials are positioned to best support the force.

13. Incorporate HNS ordnance requirements, as available.

14. Implement rationing of critical munitions as required.

15. Develop plans for emergency resupply of critical ordnance materials.

16. If authorized, establish cross-servicing/executive agency agreements as required.
17. If directed, coordinate the transfer of munitions between components and multinational forces if required to correct shortfalls.

18. Establish a retrograde plan for ordnance.

4.3.3.1.5 Transportation and Mobility Section Functions

1. Assist in preparation of the redeployment time-phased force and deployment data for submission to the JOPES Cell.

2. In coordination with the JOPES cell, monitor the redeployment TPFDD.

3. In coordination with the JOPES cell, monitor TPFDD movements into and within the AO. Inform the LRC director and other concerned individuals of occurrences that may have an adverse impact on operations.

4. Provide transportation assistance to other functional areas in the LRC.

5. If possible and where capable, collect, process, and provide in-transit visibility data on materiel arriving in or distributed within the area of operation.

6. Assess transportation feasibility for unit moves, available transportation resources, and estimated closure times.

7. Assist the commander, principal staff officers, and subordinate units on matters pertaining to mobility.

8. Where appropriate, assist in coordinating embarkation functions while concurrently reviewing and making recommendations as to the use of Government-owned and commercial transportation assets.

9. Assist in ensuring that sufficient transportation assets to support intratheater movement from the aerial port of debarkation/seaport of debarkation to the unit’s final destination will be available for the force’s use.

10. Review and recommend appropriate changes to policies, procedures, orders, and pertinent publications as they pertain to mobility.

11. Assist the MOC in employing a variety of transportation strategies, including coordinating on common-user transportation, maintaining AMC channels, arranging emergency special assignment airlift missions, utilizing the worldwide express and tender programs, commercial airlift, MSC lift, and Navy Air Logistics Office missions to support maritime and joint operations.

12. Interpret, review, and/or disseminate transportation policy directives from higher authority and prepare maritime policy instructions as required. Recommend appropriate changes to policies, procedures, orders, and pertinent publications pertaining to transportation.

13. When directed and appropriate, maintain liaison, coordinate, and represent the command with numerous key internal and external activities concerning transportation-related functions and coordinate with HHQ’s joint movement center or DDOC, as required.


15. Prepare the transportation input for inclusion in the commander’s SITREP, addressing significant shortfalls that may impact operations such as the lack of personnel, equipment lift assets, infrastructure, performance, access, and backlogs.

16. Review and develop metrics to monitor and evaluate transportation performance.
4.3.3.1.6 Maintenance and Battle Damage/Salvage Repair Section Functions

1. Establish facilities in rear areas for the repair and replacement of materiel.
2. Establish policies on repair and evacuation of equipment in support of operational forces.
3. Provide maintenance services and associated policies, including salvage/recovery, BDA, and repair.
4. Identify recoverable or salvageable equipment and establish salvage and equipment retrograde processes.
5. Monitor and coordinate follow-on flow of all equipment, spare parts, and other aircraft maintenance materiel required in support of O-level maintenance.
6. Recommend policies and procedures to ensure aircraft maintenance management, efficiency, and economy.
7. Recommend HN, other nation, or contract support, where practical.
8. Arrange/coordinate maintenance support for the voyage and battle damage repairs of shipboard equipment and systems.
9. Ensure maintenance coordination is consistent with fleet policy as outlined in Commander, United States Fleet Forces Command instruction 4790.3, Joint Fleet Maintenance Manual, and supplementals.

4.3.3.1.7 Engineering and Facilities Section Functions

1. Arrange/coordinate civil engineering support to ensure mission success. Develop, coordinate, and oversee tasks for component engineer forces, including design and construction activities.
2. Establish command engineering policy and guidance.
3. Determine and integrate civil engineering scope and execution into the command’s operations.
4. Coordinate execution of assigned portions of higher headquarters’ environmental management support plan.
5. When proper authority is in hand, identify and direct HN, contract construction agent, and troop construction/engineering capabilities and resources.
6. Screen, validate, prioritize, and recommend civil engineering priorities and method of accomplishment to the commander.
7. Evaluate and reconcile component requests for real estate, with assistance from warranted real estate contracting officers, use of existing facilities, and inter-Service support.
8. Receive guidance and report actions to civil-military engineering board (CMEB), if established.
9. Coordinate and facilitate the facility utilization board (FUB), CMEB, and environmental management board. Integrate actions from these boards, assign tasking based on board recommendations, and monitor completion.
11. Check new/renovated construction projects for compliance with the commander’s priorities.
12. Plan and coordinate the distribution of construction and barrier materials.
13. Serve as the program manager for all civil engineer-related functions.
### 4.3.3.1.8 Mortuary Affairs Section Functions

When properly authorized, Title 10 personnel may be utilized in the performance of missions involving the handling of bodies and remains to include collection, transport, and disposition thereof. Execution of such missions by Title 10 personnel is a legitimate use of these personnel. However, given the sensitivity of this issue, the standing Secretary of Defense policy is to limit handling of bodies and remains to trained mortuary affairs personnel only. These personnel are typically Army. Logistics readiness center directors are strongly encouraged to plan appropriate augment additions to their JMD. After processing by mortuary affairs, Title 10 personnel can be used to transport the bodies or remains where necessary and, as directed by the defense coordinating officer (when supporting a DSCA mission) or the ambassador (when supporting an FHA mission). Further, the handling of bodies and remains should be coordinated with local authorities to ensure proper disposition pursuant to the law peculiar to the state or nation in which the death occurred. Mortuary affairs includes:

1. Search and recovery, identification (ID), evacuation, and temporary interment, disinterment, decontamination and reinterment of deceased U.S. military, U.S. noncombatants, and Allied, coalition, and enemy personnel
2. Operating MA processing points during operations (MA collection points, theater mortuary evacuation points, MA decontamination collection points, temporary interment sites, ID labs, and port mortuaries)
3. Preparing and coordinating shipment of remains
4. Maintaining temporary interment sites
5. Recording interment and disinterment actions
6. Collecting, inventoring, storing, and processing personal effects
7. Developing standards and specifications for preparation of remains
8. Compilation of records to support search and rescue of remains operations in theater.

The mortuary affairs section is responsible for coordinating, directing, and implementing joint MA policies broadly described above within the maritime component for the care and disposition of missing and deceased personnel and their personal effects. Specific responsibilities include:

1. Serve as the central point for mortuary affairs and casualty information for the maritime component. This includes developing and disseminating standards and procedures for maritime component units and collecting/presenting mortuary affairs management statistical data to higher headquarters.
2. Maintain data pertaining to recovery, identification, and disposition of all dead and missing DOD personnel assigned to the maritime component.
3. Monitor the deceased and missing personal effects program.

### 4.3.3.1.9 Contracting and Procurement Section Functions

As with other logistics functional specialties, the LRC must plan for required contract support coverage relevant to mission but does not contracting itself. The Navy does not maintain a dedicated expeditionary contracting, contingency contracting, or operational contracting support cadre. The systems commands (e.g., NAVSUP and Naval Facilities Engineering Command (NAVFAC)) are the only entities within the Navy with the authority to issue contracting warrants to qualified contracting officers. Thus, contracting is performed in support of the MOC by shore support commands such as fleet logistics centers and echelon III commands under NAVSUP. When necessary and appropriate, in scenarios beyond traditional, steady-state services provided by the global Husbanding Service Provider contract or routine NAVFAC contract support, the Navy leverages the network of
FLCs that provide global logistics support to maritime forces operating worldwide. The MOC may be required to participate in a variety of contracting-related CFTs or even lead a joint acquisition review board (JARB), depending on their role as JFMCC. The MOC will need to coordinate efforts with an FLC to ensure any contracting support provided to a fleet unit or a joint unit operating on a Navy installation is prioritized. In addition, there may be certain plans that require the development of an Annex W (Operational Contract Support). The MOC would lead this effort with reviews/inputs from NAVSUP/FLC.

4.3.3.2 Readiness Cell

The readiness cell is responsible for monitoring the readiness of units assigned/attached to the fleet commander. This cell helps the LRC director maintain situational logistics awareness of current operations while also identifying potential shortfalls, issues, or constraints that might limit operations. The cell keeps the LRC informed on all unit supply readiness indicators such as consolidated shipboard allowance list (COSAL) and aviation consolidated allowance list range and depth, pack-up kits and COSAL kits, engine pool status, fill rates, asset availability, shipments, estimated arrival dates, and support equipment status and shortfalls. Essentially, the cell assesses and reports on the forces’ readiness to execute assigned missions and advises the LRC chief, the logistics planner, and the LRC director of any envisaged problems, potential problems, or concerns.

Essentially, the cell assesses and reports on the forces’ readiness to execute assigned missions, and advises the LRC chief, the logistics planner, and the LRC director of any envisaged problems, potential problems, or concerns. The functions of the readiness cell are as follows:

1. Assess the effectiveness of logistics support.
2. Maintain visibility of available resources and assess adequacy of combat support activities to meet operational requirements.
3. Monitor critical supply capabilities, resolving problems and expediting resource movement.
4. Review reports related to combat support sustainment required by applicable instructions, regulations, manuals, and directives for operations.
5. In coordination with the LRC individual responsible for performing the transportation functions, monitor transportation contingency data received from subordinate units, higher headquarters, and other transportation agencies.
6. Ensure units report material condition daily.
7. In coordination with the LRC individual responsible for performing the ordnance functions, monitor and manage the materiel readiness of critical weapons systems and ordnance stocks in or in transit to the AO.
8. Ensure a current aircraft status board is maintained.
9. In coordination with the officer performing the maintenance functions:
   a. Maintain situational awareness on all functions of aircraft maintenance throughout the AO to ensure responsive support and mission accomplishment.
   b. Prepare maintenance status reports as required and provide input to the MOC SITREP, the logistics situation report, and the logistics common operating picture.
   c. Prepare all aircraft maintenance logistic reports and provide them to the MOC LRC director.
4.4 LRC BATTLE RHYTHM EVENTS

4.4.1 Logistics Coordination Board Overview

The LRC supports the commander’s decision cycle by conducting its own BR event with its subordinates and appropriate supporting commands. The main LRC battle rhythm event is the daily Logistics Coordination Board (LCB). The LCB is the primary forum in which logistics collaboration and coordination occurs and is primarily designed to offer an opportunity for the LRC director or his/her designated representative, (e.g., the deputy, the LRC chief, or the logistics planner) to discuss planned or developing operations and for subordinate logisticians to call attention to a problem the component logisticians cannot solve themselves. In some cases, the LRC director may be able to issue guidance or devote resources on the spot in the LCB. In other cases, he/she may have to seek guidance from the commander or HHQ J–4. Due to the need for the LRC director to communicate the commander’s wishes to staff and that of supporting staffs, effective practice dictates that the LCB follow the CFT event, where the commander gives guidance to subordinate forces (e.g., the commander’s update brief (CUB), the JFMCC brief, or other event where the commander and all subordinates meet). Understanding what the commander directed in that CFT allows the LRC director to ensure the concept of logistics support and the actions of supporting forces support the CONOPS. This board should be supported by other MOC codes where it makes sense, and this board should be listed in the official command battle rhythm and scheduled such that its products can feed other critical BR events. Logistics representatives in those events must have the most current logistics information. Unless the MOC is assigned as the JTF, in most cases this event is chaired by the higher joint commander J–4, and the MOC LRC director and other MOC representatives are participants.

4.4.2 LCB Inputs

1. Joint higher headquarters initial planning guidance
2. Campaign assessments from the maritime assessment team (MAT)
3. Commander’s initial planning guidance
4. Subordinate commanders’ and/or commands’ status reports and assessments/estimates
5. Components’ status reports and assessments/estimates
6. Intelligence preparation of the operational environment
7. Maritime planning group or operational planning team branch and sequel planning
8. Reports and information provided by the logistics watch stander on the fleet command center watch floor (when stood up).

4.4.3 LCB Outputs

1. Guidance to the logistics planner for branch/sequel planning
2. COPS/FOPS: Input to formal orders; branch/sequel planning
3. Where appropriate, guidance to subordinate commanders and/or commands.

4.4.4 Other LRC Battle Rhythm Events

The LRC may conduct other internal BR events as needed, such as the joint acquisition review board, the facilities utilization board, and other similar function-focused CFTs. The most common and useful BR event in support of the LCB is the logistics working group, primarily held to allow action officers within a MOC, and often representatives from subordinate and stakeholder logistics commands to coordinate actions as the result of
the LCB or to develop recommendations for decision at the subsequent LCB. Any events that routinely require participation by MOC representatives outside the LRC should be part of the command battle rhythm for visibility and appropriate scheduling. Conversely, events totally internal to and controlled by the LRC should not clutter the typically limited white space available in the battle rhythm.
CHAPTER 5

Plans

5.1 GENERAL

Planning is fundamental to the success of any military operation. Maritime operations center planners must have the requisite education and training in maritime planning. Commanders must provide their guidance at the outset of the planning process and during each subsequent phase. For a detailed discussion of Navy planning, refer to NWP 5-01. Figure 5-1 highlights the planning-related CFTs.

Note

COPS and FOPS planning discussed in chapter 3 is focused on near- to midterm operational planning. When referencing NWP 5-01, Appendix M (Navy Planning Process in a Time-constrained Environment) is a good reference for COPS and FOPS planning. Separately, this chapter is focused on the expanded scope for longer-range planning efforts or non-time-sensitive planning.

5.2 FUTURE PLANS CELL

The FUPLANS cell contains the core group of planning experts for the maritime operations center. They support MOC operations by providing long-range planning as well as coordinating for the staff assessment of and input to the commander’s contribution to the higher headquarters long-range plans such as campaign plans, OPLANs, and OPORDs. FUPLANS manages the joint operation planning process (JOPP) and complementary naval planning process as described in NWP 5-0. The focus of the command’s future planning is development of plans, orders, and policy directives. Future planning processes and products generally require significant coordination with entities both internal and external to the MOC. They also generally require adequate time to integrate the work of this broader planning audience.

5.3 MARITIME PLANNING GROUP

Future plans conducts long-term operational planning that is focused on a time period beyond the scope covered by COPS and FOPS. Examples include CONPLANS, OPLANS, and sequels to phases within an OPLAN. The maritime planning group is manned by personnel familiar with the deliberate contingency and CAP processes and JOPES products. MOC leadership must balance the size of the planning group. A small group of core planners is more manageable and easier to focus; a larger group can provide for broader expertise. A small, focused effort is valuable during the initial mission analysis phases of planning. The MPG is the avenue by which the plans’ directorate planning efforts are synchronized across the staff during the staff estimate process. Staff estimates are essential throughout planning, as they form the basis for supporting annexes and appendixes of an OPLAN or OPORD. Staff estimates are continuously updated as the situation or conditions within the operational environment change. At all times, though, it is imperative that the planning team and staff communicate and synchronize their efforts to ensure that planning for an operation is conducted to achieve a common goal.
Figure 5-1. Notional MOC with Planning-related CFTs Highlighted
Planners must anticipate the adversary’s intent to deny and degrade C4ISR capabilities and then address potential impacts these degradations will have on operations. Planners must understand and prioritize the essential information exchange requirements to conduct the mission, the adversary’s capabilities to interfere with those exchanges, and the potential impacts that interference could have on the commander’s C2 capabilities. Further, planners need to include in their planning efforts a C2 construct that supports operations in a denied or degraded environment through the development of preplanned response options. Additional information on planning for denied and degraded environments can be found in appendix D and is available in TM 3-32.3-12 and TM 3-56.1.

5.3.1 Functions

1. Conduct operational planning in support of the commander tasking.
2. Coordinate planning efforts with higher, lower, adjacent, and multinational headquarters and coalition partners as required.
3. Determine and provide supportability of higher headquarters plans.
4. Identify planning situations requiring sequel plans and assist the COPs or FOPS cell in crisis action planning, if required.
5. Appoint OPT directors.
6. Synchronize planning for the staff.
7. Transition plans from Plans to FOPs to COPs.

5.3.2 Composition

1. Led by the N5, deputy N5, or senior planner.
2. COPS/FOPS planner
3. Maritime planning group planner
4. Logistics planner
5. Maritime intelligence operations center planner
6. Staff judge advocate
7. Maritime assessment group representative
8. AMD planning team
9. Subject matter experts from within the staff and LNOs, as required.
10. Communications and information systems representative
11. Fires element/targeting representative
12. Information operations cell representative
13. Maritime air operations cell representative.
5.3.3 Points of Coordination

1. Internal: Appropriate MOC CFTs.

2. External:
   a. Higher headquarters
   b. Other component commands
   c. Subordinate commands
   d. Supporting commands (e.g., Fleet Cyber Command)
   e. Host nation
   f. Intergovernmental organizations
   g. Nongovernmental organizations
   h. Other Government agencies
   i. Civil-military operations center.

5.3.4 Inputs

1. Senior commander’s OPLAN, OPORD, stated goals and objectives, warning order/planning order/alert order

2. Maritime commander’s guidance/intent

3. Intelligence preparation of the operational environment

4. HHQ guidance

5. HHQ staff estimates

6. HHQ intelligence products

7. Refined commander’s intent

8. Commander’s wargaming guidance

9. Approved COAs

10. Enemy courses of action

11. Subordinate commander’s estimates of supportability.

5.3.5 Outputs

1. The commander’s estimate of supportability for the JFC long-range plans

2. Maritime support plan or OPLAN
3. Approved mission statement

4. Commander’s intent

5. Commander’s planning guidance

6. Warning orders

7. Course of action analysis and evaluation guidance

8. Refined commander’s intent

9. Wargaming guidance

10. Approved COAs

11. Refined ECOAs

12. Staff estimates

13. War game results:
   a. Decision support matrix
   b. Refined task organization C2 requirements
   c. Identification of required assets and shortfalls
   d. Refined CCIRs
   e. Refined time-phased force and deployment data inputs (as applicable)
   f. List of critical events and decision points
   g. Development of IO objectives and tasks
   h. Course of action war game worksheet
   i. War game synchronization matrix.

14. Updated IPOE products and refined staff estimates

15. Branches and sequels identified for further planning

16. Transition brief and fragmentary order outline

17. Command relationships.

5.4 OPERATIONAL PLANNING TEAMS

The inherent complexity of modern military operations requires close coordination, synchronization, and information sharing across the commander’s staff. Integrated planning provides the commander and staff a disciplined approach to planning that is systematic, coordinated, and thorough. It helps planners consider all relevant factors, reduce omissions, and share information. This approach to planning brings together the
commander and subordinate commanders, staff officers, and those SMEs necessary to develop comprehensive plans or orders. One of the ways a commander may conduct integrated planning is through the use of OPTs.

The commander’s role becomes more critical when time and requirements start to compete with one another and only the commander can adequately shorten the process. This is done through regular involvement in the planning process; sound, precise guidance, and early decisions on courses of action; wargaming; and the formality of the process. If an OPT is left trying to guess the commander’s intent, mistakes will be made in the process. The commander’s intent gives the force direction in the absence of specific orders. The best commander’s intent is written by the commander.

The composition of the OPT must be adequate to support the mission at hand. That said, the OPT may be assigned a mission for which a mission statement is not yet fully developed. In this case, the initial formation of the OPT will include significantly more cross-functional representation than will be required throughout the existence of the OPT. The OPT lead will release individuals from the OPT as the mission is defined and required expertise is identified. This methodology remains more sound than attempting to call assistance as required. Having SMEs available during mission analysis allows the OPT lead to draw on multiple experiences to help define OPT needs with respect to composition.

OPTs discern the operational objectives and effects that must be achieved through essential tasks, synchronized and simultaneous action, and appropriate allocation of forces in order to accomplish the mission. OPTs also determine end-of-phase conditions, decisive points along the execution of the plan, and decision points requiring the commander’s involvement to advance the plan. If the plan is written without these key attributes or poorly worded, it will be difficult to later assess operational progress within the plan and implications and to provide decision-quality recommendations to adjust or change the plan.

Either FOPS or the MPG may establish an OPT to address a specific planning requirement. The OPT lead reports to the entity that established the OPT. An excellent source for additional information on OPTs is the Marine Air Ground Task Force Staff Training Program pamphlet (MSTP) 5-0.2, Operational Planning Team Guide, USMC, May 2012.

5.4.1 Functions

1. Integrate staff estimates from multiple WGs to solve a single planning problem on a single-event horizon.

2. Support the commander in the decision-making process.

3. Synchronize the war-fighting functions throughout the operational environment.

4. Ensure all relevant planning information is shared among the subordinate commanders and staff.

5. Ensure the commander’s plan has been thoroughly developed and rigorously analyzed.

6. Ensure planning adequately addresses assessment functions that will support plan execution.

5.4.2 Composition

1. Senior MPG planner as lead

2. Fleet command center representative

3. Maritime intelligence operations center representative

4. Logistics planner

5. Staff judge advocate representative
6. Information operations representative

7. Assessment representative

8. AMD planning team (as required)

9. Subject matter experts from other areas as required/desired.

5.4.3 Points of Coordination

1. Internal:
   a. Maritime planning group
   b. Current operations
   c. Future operations
   d. Maritime intelligence operations center
   e. Logistics readiness center
   f. Staff judge advocate
   g. Information operations cell
   h. Maritime assessment group
   i. Knowledge and information management WG
   j. Fires element
   k. Maritime air operations center
   l. Public affairs officer.

2. External:
   a. Higher headquarters staff
   b. Subordinate HQ staff
   c. Other component commanders’ staffs
   d. Fleet Cyber Command/Tenth Fleet

5.4.4 Inputs

1. Commander’s guidance/intent/desired end state

2. Mission statement

3. Staff estimates

4. Forces list
5. Intelligence preparation of the operational environment

6. Existing OPORDs

7. Theater security cooperation plan

8. Situation reports from subordinate commands and other component commands.

### 5.4.5 Outputs

1. Courses of action selection brief

2. Transition brief

3. Commander’s decision brief.

### 5.5 JOINT OPERATION PLANNING AND EXECUTION SYSTEM CELL

JOPES and its in-progress replacement Adaptive Planning and Execution System (APEX) applies to the development and implementation of operation plans and operation orders, and includes subprocesses of mobilization, deployment, sustainment, redeployment, and demobilization. The Navy planning process aligns with, and complements, the joint contingency and crisis action planning process prescribed in the Chairman of the Joint Chiefs of Staff manual (CJCSM) 3122 series (JOPES Volumes I and III) and replacement 3130 series (APEX 3130.03 has replaced JOPES Volume II; 3130.02 and 3130.04 will replace JOPES Volumes I and III in calendar year 2013). Navy supporting plans are developed once the combatant commander’s concept has been approved and a plan developed. Navy supporting plans address the tasks identified for Navy fleet forces and outline the actions of assigned and augmenting forces. The development and execution of any CONPLAN or OPLAN will involve the JOPES cell.

Navy component commanders require a single source of accurate and timely deployment information to ensure that deployment planning and execution supports the planning and execution for the employment of forces. NCCs need to present consolidated force and transportation requirements to the supported joint force commander and the transportation providers. Additionally, the NCC requires the ability to monitor and influence the phasing of Navy forces into theater using current capability sets and associated war-fighting functions.

Although the MOC director is the principal staff officer responsible to the commander for plan development and execution, he or she is assisted by the entire staff. A JOPES cell is essential to fully integrate force deployment planning and execution into the planning process. The JOPES cell reviews TPFDDs and deployment orders (DEPORDs) for compliance with the combatant command TPFDD letter of instruction (LOI) and established policies, regulations, and commanders intent. The TPFDD LOI is issued by the combatant commander and provides operation-specific guidance for utilizing JOPES processes and systems to provide force visibility and operational agility through the TPFDD development, validation, and execution process.

The JOPES cell and the OPT work as an integrated team. Once a notional force list is identified and certain critical information is available, such as an area of operations, plan identification, C-day, earliest arrival date/latest arrival date, ports of debarkation and force requirement number (FRN) structure, plan shells can be developed and distributed. These plans reflect the results of the force requirements specified by the commander and are coupled with his intent regarding the phasing of forces. The OPT and the JOPES cell use the authority available through report for planning to gain further situational awareness and clarity on issues affecting operational, logistical, and deployment planning. The OPT and the JOPES cell shall develop the TPFDD and RSO&I plans concurrently before a COA decision has been reached.

### 5.5.1 Functions

1. Ensure deployment requirements support mission requirements.
2. Prepare and disseminate deployment planning guidance, including TPFDD LOI.
3. Assist the force commander in properly identifying force and sustainment requirements.
4. Review appropriate orders and provide subject matter expert on DEPORDS.
5. Review and adjust requirements prior to verification of the TPFDD.
6. Conduct verifications of records for execution.
7. Review allocation and manifesting.
8. Coordinate with supporting and supported organizations.
9. Maintain a record of all messages and actions pertaining to the deployment.
10. Serve as the functional experts to the commander on all JOPES issues.

5.5.2 Composition

As required.

5.5.3 Points of Coordination

1. Internal:
   a. Fleet command center
   b. Maritime planning group
   c. Logistics readiness center.

2. External:
   a. Navy force provider; supporting command
   b. Combatant command JOPES functional manager
   c. U.S. Transportation Command.

5.5.4 Inputs

1. Combatant command TPFDD LOI and supplemental guidance
2. JOPES newgroups
3. Output of maritime planning group and operational planning teams
4. Sustainment and services cell sustainment requirements.

5.5.5 Outputs

1. Time-phased force and deployment data
2. TPFDL (Appendix 1 to Annex A of the OPLAN).
3. JOPES extracts to FCC.
5.6 RED CELL

The Red Cell supports decisionmaking during planning and operations by broadening staff understanding of the operational environment. This is accomplished through challenging planning assumptions by acting as the command’s independent adversary. The Red Cell provides critical review and analysis of the Blue OPLAN to identify its potential weaknesses and vulnerabilities by identifying and addressing options available to the adversary. To ensure that the adversary is appropriately portrayed, the Red Cell will assist in the identification of friendly and enemy vulnerabilities, anticipate the cultural perceptions of both the adversary and partners, and anticipate strategic implications. The Red Cell process can be applied to noncombatant operations to determine unforeseen or likely obstacles.

5.6.1 Functions

1. Provide independent analysis of ECOGs/critical vulnerabilities.
2. Assist in development/refinement of enemy COAs used during wargaming.
3. Support COA development/operational planning process.
4. Assist the commander in assessing COAs against an enemy.
5. Portray a realistic enemy point of view during COA wargaming.
6. Challenge planning assumptions.

5.6.2 Composition

1. Red Team leader (command and staff planning background)
2. Red Team member(s) (mix of intelligence and operational expertise)
3. Red Team practitioner(s) (functional or regional expert).

5.6.3 Points of Coordination

1. Internal:
   a. Intelligence plans
   b. Intelligence preparation of the operational environment
   c. Maritime planning group/FOPS OPT lead tasked with development of COAs
   d. Future operations
   e. Maritime assessment group
   f. Information operations cell
   g. Knowledge and information management WG.
2. External:
   a. Joint force commander JISE
   b. Theater JIOC
c. National intelligence organizations
d. Subordinate commander staff intelligence and operational planning organizations
e. Other components.

5.6.4 Inputs
Planning products, to include:

1. Refined commander’s intent
2. Wargaming guidance
3. Approved COAs
4. Refined ECOAs
5. Initial staff estimates.

5.6.5 Outputs
Independently produces:

1. War game results
2. List of critical events and decision points
3. Updated IPOE
4. Subordinate commander’s estimates of supportability
5. Branches and sequels identified for further planning.

5.7 ASSESSMENT
Assessment is defined in joint doctrine as: 1) A continuous process that measures the overall effectiveness of employing joint force capabilities during military operations; 2) Determination of the progress toward accomplishing a task, creating a condition, or achieving an objective; 3) Analysis of the security, effectiveness, and potential of an existing or planned intelligence activity; 4) Judgment of the motives, qualifications, and characteristics of present or prospective employees or “agents.” (JP 1-02. Source: JP 3-0)

Within the commander’s decision cycle assessment is a planning function, with the responsibility to determine whether the planned and executed actions of the force create desired conditions and end states in accordance with the commander’s intent or pose a risk to the force or mission through undesired effects. Fundamental to assessment are judgments about how the OPLAN is progressing to create the desired conditions (either in the current phase or overall) as the result of subordinate assigned task accomplishment (judging performance). These judgments allow the commander and the staff to determine where adjustments must be made to operations and serve as a catalyst for future planning. Ultimately, assessment allows the commander and staff to understand the operational impact of a constantly evolving situation and adjust execution to achieve mission accomplishment.

The assessment process begins during mission analysis when the commander and staff develop clearly defined, feasible, and achievable objectives which are representative of the commander’s desired end states. Planners identify unit tasks and purposes that create desired conditions which must exist to achieve end states during CONOP development in the Navy planning process. (Note: “effects” and “conditions” are used fairly
interchangeably within the joint construct; an effect is a consequence of action, whereas a condition is a state of circumstance. The term “effect” connotes change in the operational environment, while “condition” indicates a status of the operational environment; both relate to operational milestones en route to an objective and both may be used to measure the operational environment itself, but the term “effect” may have negative connotations due to the overuse/misuse of the concept in past years. This should not impact the role of the assessment cell to measure effects, OPCONs, and their impact on objectives.) The staff then determines how to measure performance in support of task accomplishment as well as how to measure progress of the concept of the operation to determine whether the unit is on or off plan, identify whether plan adjustments are required, and ensure that planned measurements are relevant, collectable, and measurable. Commanders adjust operations based on their assessment to ensure objectives are met, and the military end state is achieved. The assessment process is continuous and directly tied to the commander’s decisions throughout planning, preparation, and execution of operations. Staffs help the commander by monitoring the numerous aspects that can influence the outcome of operations and provide the commander timely information needed for decisions.

Assessment occurs at all levels and across the entire ROMO. Outputs of the tactical force assessment may be inputs to operational command assessment. Similarly, the outputs of the operational-level assessment may be inputs to the strategic command assessment. However, each echelon commander will have his own operational conditions to fulfill, based on the operational approach he approves for the force. These do not necessarily fit cleanly into HHQ assessment processes but may inform the assessment coordination between two echelons.

Assessment at the operational and strategic level is typically broader than tactical assessments (e.g., combat assessment) and uses measures of effectiveness and developed indicators that inform MOEs to support strategic and operational mission accomplishment. Strategic- and operational-level assessment efforts concentrate on the fulfillment of intent, the accomplishment of broader tasks and lines of operation, establishment of conditions and, ultimately, the completion of objectives toward an end state. Continuous assessment helps operational commanders focus beyond the completion of military activities to determine if the force is accomplishing the operational intent, creating the right conditions to achieve objectives, and how the plan is progressing to achieve desired effects (i.e., doing the right things rather than doing things right).

Tactical-level assessment typically uses measures of performance to evaluate task completion. The results of tactical tasks are often physical in nature but also can reflect the impact on specific functions and systems. Tactical-level assessment may include assessing the performance of task completion with respect to its purpose.

1. Did the task achieve the purpose for which it was assigned?

2. Does the collective result of assigned units completing their tasks correctly to achieve designated purposes within a phased construct create the phase conditions that the CONOPs intended?

Assessment of results at the tactical level helps commanders determine operational and strategic progress, so JFCs must have a comprehensive, integrated assessment plan that links assessment activities and measures at all levels.

Combat assessment is an example of a tactical-level assessment. Combat assessment typically focuses on determining the results of weapons engagement (with both kinetic and nonkinetic capabilities), an important component of the joint fires process (see JP 3-60). Combat assessment is composed of three related elements:

1. Battle damage assessment

2. Munitions effectiveness assessment

3. Future targeting or reattack recommendations.

However, combat assessment methodology also can be applied by joint force functional and Service components to other tactical tasks not associated with joint fires (e.g., disaster relief (DR) delivery assessment, relief effectiveness assessment, and future relief recommendations).
5.7.1 Assessment Process and Measures

The primary function of the operational assessment process is to provide the commander with an understanding regarding the force’s ability to fulfill his intent. Intent is provided by the commander, and the details are provided in the plan which he/she approves. In order for the staff to determine success based on plan execution, it must contain some basic attributes for the staff to continuously assess:

1. An operational approach: The end state, objective(s), center(s) of gravity, and methodology to impact the center(s) of gravity, based on decisive points along lines of operation.

2. Conditions that must be achieved to recognize phase transition conditions, shift operational priorities for the force, take advantage of opportunities, as well as countering unanticipated threats and maintain operational initiative.

3. Specified and essential tasks, sequenced and synchronized along LOOs, allocated in time and space to specific subordinate force commanders and supporting commands/agencies/stakeholders.

4. Assumptions, decision points, and undesired conditions: Identify the areas that the plan may not specifically address.

5. Risk: Identify the commander’s threshold for risk to force and risk to mission.

Based on these basic planning attributes to assess, the process is designed to provide the commander with continuous feedback regarding the disposition of the plan and by extension, intent. The primary measurement of specified tasks is through MOPs, while the recognition of creating desired conditions are measured using MOEs. For detailed discussions regarding the establishment of MOPs and MOEs, refer to the Commander’s Handbook for Assessment Planning and Execution, chapter 2. The progress of the plan, the proximity to decision points and risk thresholds, the recommendation to phase transition/force priority, and recommendations to adjust the plan to maintain the initiative and take advantage of opportunities are based on operational context, which is determined and presented to the commander by comparing tasks and purposes achieved to conditions created in the operating environment. This is the operational assessment process, the basis for learning, adaptation, and subsequent adjustment for future planning dependent on the degree of variance to the original CONOPS.

The assessment process entails three distinct tasks:

1. Continuously monitoring the operational environment and the progress of operations against those allocated and planned

2. Evaluating MOEs and MOPs to determine progress relative to desired effects and operational conditions necessary to fulfill commander’s intent

3. Developing recommendations/guidance for improvement. Effective assessment requires indicators, criteria, and thresholds for evaluating the degree of success in accomplishing the mission.

The assessment process uses MOPs to evaluate task performance at all levels of war and MOEs to measure effects. The combined understanding of completed tasks, progress of the plan, and disposition of effects and conditions in relation to one another provides the context for measuring the achievement of objectives. Measurements of effectiveness help answer questions such as: Are we doing the right things? Are our actions producing the desired effects, or are alternative actions required? Measurements of performance are directly associated with task accomplishment. Measurements of performance help answer questions such as: Was the action taken? Were the tasks completed to standard? How much effort was involved? Well-devised measures can help the commander and supporting staff understand the relationship between force actions and resulting conditions.
A measurement of effectiveness is a criterion used to assess changes in system behavior, capability, or operational environment tied to measuring the creation of an effect. It measures the relevance of actions being performed. MOEs measure the progress of an effect; they do not measure task performance. These measures typically tend to be more subjective rather than completely objective and can be crafted as either qualitative or quantitative measures. Although quantitative measures depend largely on the judgment and expertise of the analyst, they can be useful to reflect a trend and show progress toward a measurable threshold or a desired condition. A MOP is a criterion used to assess friendly actions that is tied to measuring task accomplishment. Measures of performance provide the progress of specified tasks and actions directed to the tactical force. They can be populated through combat assessment, situational reports, commander estimates, update briefs, or other tactical reports detailing primarily quantitative measurement of unit tasks. Measurements of performance simply describe whether a task was completed, as ordered/directed; they do not present indicators of the changes made to the operational environment. The assessment process and related measures should be relevant, measurable, responsive, and resourced so there is no false impression of accomplishment.

1. Relevant. MOPs and MOEs should be relevant to the task, condition, operation, the operational environment, the military end state, and the commander’s decisions. This criterion helps avoid collecting and analyzing information that is of no value to a specific operation. It also helps ensure efficiency by eliminating redundant efforts.

2. Measurable. Assessment measures should have qualitative or quantitative standards they can be measured against. To effectively measure change, a baseline measurement should be established prior to execution to facilitate accurate assessment throughout the operation. Both MOPs and MOEs can be quantitative or qualitative in nature, but meaningful quantitative measures are preferred because they are less susceptible to subjective interpretation.

3. Responsive. Assessment processes should detect situation changes quickly enough to enable effective response by the staff and timely decisions by the commander. Time for an action or actions to take effect within the operational environment and indicators to develop should be considered. Many actions directed by the JFC require time to implement and may take even longer to produce a measurable result.

4. Resourced. To be effective, assessment must be adequately resourced. Staffs should ensure resource requirements for collection efforts and analysis are built into plans and monitored. Effective assessment can help avoid duplication of tasks and avoid taking unnecessary actions, which in turn can help preserve combat power.

Commanders and staffs derive relevant assessment measures during the planning process and reevaluate them continuously throughout preparation and execution. They consider assessment measures during mission analysis; refine these measures based on the JFC’s planning guidance; provide detailed feedback in staff estimates; war game thresholds, and conditions during COA development; and include MOEs, MOPs, and collection requirements in the approved plan or order. Well-devised MOPs and MOEs, supported by an effective collection plan, help staffs collect measures to analyze and provide the commander with decision-quality assessments.

Although assessment is a planning function, the assessment function is best accomplished by individuals who did not exclusively contribute to planning. An independent assessment of the progress of the plan tends to ensure the product is not unduly influenced by those that created the plan. The MOC director facilitates the assessment process by incorporating assessment working groups into the headquarters’ battle rhythm. Various elements of the staff use assessment results to adjust both current operations and future planning.

Friendly, adversary, and neutral diplomatic, informational, and economic actions applied in the operational environment can impact military actions and objectives. When relevant to the mission, the staff must leverage the assessment process to evaluate the results of these actions. This typically requires collaboration with other agencies and multinational partners in the interest of unified action. Many of these organizations may be outside the commander’s authority. Accordingly, the combatant commander should grant force organizations DIRLAUTH with key outside organizations to the extent necessary to ensure timely and accurate assessments.
5.7.2 Assessment Cell

The assessment cell supports the planning process and facilitates the development of an integrated assessment of trends using pre-established decisive points arrayed along lines of operation. The assessment cell works closely with OPTs in collecting inputs and formulating recommendations to the MAG. Additionally, the assessment cell assists the maritime assessment group in the development of draft measures of effectiveness during the operational mission analysis process in planning.

5.7.3 Maritime Assessment Group

The maritime assessment group is an assessment cell that continuously collects, analyzes, and tracks friendly force achievement of conditions in the fulfillment of the commander’s intent, based on approved operational plan(s). The MAG consists of a combination of planners and analysts dedicated to coordinating assessment activities across the staff, collaborating with peer components and higher headquarters, and collecting information from subordinate commands and supporting agencies. Their primary purpose is to create operational context for the commander with products that illustrate the achievement of specified tasks, their relation to establishing operational conditions required to advance the plan, identifying proximity to pending commander’s decisions, measuring the threshold of risk to force and mission, and making recommendations to maintain operational momentum. The MAG typically employs an effects assessment working group to gather representatives of the staff and conduct cross-functional assessment of operations and planning efforts. The Joint Commander’s Handbook for Assessment Planning and Execution, Appendix B, contains further guidance related to assessment cell processes and products.

Effects assessment begins when the maritime planning group or operational planning team selects measurable, desired effects. Planning anticipates the potential effect friendly actions will have on the extended operating environment as well as highlighting how friendly actions may affect the enemy, allies, neutral parties, and U.S. forces. The MAG and EAWG perform the following basic functions:

1. Continuously evaluate tasks and effects within the current phase of the operation and the impact to conditions required for subsequent phases. By monitoring the execution of the plan, assessing the progress of each phase toward accomplishment of the commander’s objectives based on the MOE/MOP, the EAWG provides recommendations to the commander on whether the operation is progressing in accordance with the plan.

2. Incorporate information from cross-functional staff representatives, LNOs, interagency and stakeholder representatives, HHQ, and peer components. Cross-functional inputs are critical from COPS, MIOC, information operations cell, logistics, the Red Cell, and functions closely tied to the current phase of operations (e.g., fires cell representatives during major combat operations, interagency cell representatives during humanitarian aid operations).

3. Provide assessment inputs to the MPG for approval of recommendations to the commander, in accordance with current planning efforts. Inputs are further incorporated into commander’s decision venues for consideration and guidance to planners.

5.7.4 Composition

The MAG is staffed by a permanent staff of planners and analysts and is best organized within the plans directorate. The EAWG is a cross-functional working group, chartered to increase the scope and scale of the MAG’s own assessment of operations and their relation to the plan. The MAG or EAWG may also include non-military personnel, as appropriate, to provide the necessary input and analysis assistance to detail diplomatic, information, military, and economic activities within the political, military, economic, social, infrastructure, and information environment. For the notional Navy fleet/component commander MOC, the MAG should include trained operational planners to embed within the staff’s operational planning teams and operational planning functions as well as senior analysts to collect and analyze actions and environmental factors in the task and effects assessment processes. The supporting EAWG would meet as often as conditions within the operational
environment change; in combat operations, conditions may change daily (or hourly), while during a stabilization phase conditions may change monthly. The EAWG might consist of:

1. Current operations representative
2. Future operations and MPG planners
3. Maritime intelligence operations center planner
4. Logistics readiness center representative
5. Fires element or targeting team representative
6. Staff judge advocate
7. Public affairs representative
8. Information operations representative
9. Medical, civil affairs, and civil-military operations representatives
10. Political advisor
11. Liaison officers from senior, component, and subordinate commands, as required
12. Other representatives or LNOs as necessary (from NGOs, other OGAs, HN, etc.).

5.7.5 Points of Coordination

1. Internal:
   a. Current operations
   b. Future operations
   c. Maritime planning group
   d. Information operations cell
   e. Maritime intelligence operations center
   f. Logistics readiness center
   g. Commander’s special assistants, as required
   h. Knowledge and information management WG
   i. Maritime air operations cell
   j. Fires element.

2. External:
   a. Higher headquarters assessment cell
   b. Component commander’s assessment cells
c. Subordinate commanders’ staffs

d. Other agencies, as required (other Government agencies, NGOs, HNs, etc.).

5.7.6 Inputs

1. Commander’s guidance and intent

2. OPLANs/OPORDs

3. Center(s) of gravity, operational approach, decisive points, and operational objectives

4. Approved operational conditions, by phase

5. Essential tasks

6. Approved assumptions and acceptable risk (to force, to mission)

7. Approved MOEs and MOPs

8. ROE/RUF

9. Approved CCIRs/RFIs

10. Approved commander’s decision points

11. Current operational situation, including enemy reaction.

5.7.7 Outputs

1. Operational assessments relating to the progression of the plan, fulfillment of intent

2. Operation phase transition and force reallocation/reprioritization recommendations

3. Operation replanning recommendations (branches and sequels)

4. Proximal estimations of pending commander’s decisions, based on operational conditions

5. Risk assessment

6. ROE/RUF/CCIR/RFI change recommendations

7. Assessment reports and recommendations regarding synchronization of forces and functions to the commander and higher headquarters.
6.1 COMMUNICATIONS AND INFORMATION SYSTEMS CENTER/NAVY COMMUNICATIONS SYSTEM COORDINATION CENTER

The CISC/NCCC is organized to plan and manage CIS/CS for the commander. The foundation of the CISC/NCCC is joint and Navy doctrine. The CISC/NCCC will coordinate with the HHQ command, control, communication, and computer systems division (J–6), the single point of contact for theater command and control/communication system support coordination. There are four cells within the CISC/NCCC—CS COPS cell, CS plans cell, CS MOC support cell, and headquarters support cell—that are staffed to accomplish the CISC/NCCC’s three core mission essential tasks. Figure 6-1 highlights the CIS-related CFTs.

1. Provide CS COPS support by providing CS situational awareness and recommended COAs to COPS and C2 of C2 watch officer.

2. Provide CS planning support to future operations and MPG and other CFTs as required.

3. Provide CS support to the MOC and joint task force headquarters’ CFTs as required.

The CS COPS cell has four tasks: acquire, assess, report, and respond. The CS COPS cell within the CISC/NCCC acquires information concerning transport, networks, systems, and applications that support the commander’s C2 apparatus for ongoing operations and near term plans. The CS COPS cell assesses the operational and technical impact of CS events and reports outages and degradations that impact the commander’s ability to exercise command and control. The CS COPS cell responds as appropriate to manage or influence the CS entity supporting maritime operations. The CISC/NCCC watch officer within the CS COPS cell is the command and control of networks watch officer described within TM 3-32.3-12.

The CS plans cell within the CIS center must coordinate with communications personnel, the staff, CFTs, subordinate commanders, and higher headquarters to ensure a comprehensive communications plan (COMPLAN) that provides SATCOM, COMSEC, frequency spectrum management, and communications support to the MOC. The CS plans cell assesses the adversary’s threat, the vulnerabilities and impacts to the CIS environment, and prepares mitigation plans, PPRs, and secondary and tertiary means to transport communications and data. The CS plans cell members attend various CFTs and are able to present CS estimates of supportability to COAs planned. (The CIS center must ensure SATCOM, COMSEC, and frequency spectrum are not arbitrarily changed or used without prior coordination with appropriate component and joint communications staffs.)

The CS MOC support cell and HQ support cell provide the required voice, video, and data transport, networks, systems, and applications to all the CFTs of the MOC. The COP provides mission essential information to COPs, HHQ, and subordinate commands. Myriad other command and control systems are required for the CFTs to exchange information and collaborate internal and external to the MOC. For tactical execution on Multi-TDL Networks (MTN), this must include access to all mediums (extremely high frequency/ultrahigh frequency/superhigh frequency) and networks (Multicast Tactical Digital Information Link (TADIL)–J/Satellite TADIL J/Unicast TADIL J). To ensure quality of service and assured C2 connectivity, CTF IAMD requires the ability to manage fleet or joint tactical data link (TDL) network access, to include redundant and alternate communication paths, and support to disadvantaged end users. Due to the nature of force orders and real-time data coordination, TDL capability must be verified to be reliable and validated for tactical operation.
Figure 6-1. Notional MOC with CIS-related CFTs Highlighted
6.1.1 Functions

1. Assist MOC planners in developing plans for implementing the HHQ commander’s CIS guidance (CS plans cell).

2. Provide communications guidance to all forces assigned or attached to the commander (CS COPS and CS plans cell).

3. Consolidate and validate all requests from forces assigned or attached to the commander for additional CIS assets, equipment, and/or personnel (CS COPS and CS plans cell).

4. Validate and forward satellite access requests to the HHQ commander for forces assigned (CS COPS cell).

5. Validate and forward all friendly force gateway access requirements required to support higher headquarters operations to the HHQ commander (CS COPS cell).

6. Monitor the arrival of deployed communications and intelligence equipment and personnel in the area of operations (CS COPS cell).

7. Monitor network operations; assess the effectiveness of CIS and operations (CS COPS cell).

8. Display and disseminate information about CIS operations (CS COPS cell).

9. Report CIS outages and degradations that meet CCIR thresholds to the MOC director (CS COPS cell).

10. Develop branches and/or sequels to the commander’s communications and intelligence systems architecture necessitated by changes in the mission, organization, or operations plans (CS plans cell).

11. Coordinate with the IO cell the implementation of tailored readiness options and INFOCON appropriate responses when own networks are being probed, scanned or mapped, or under attack (CS COPS and CS plans cells).

12. Coordinate and monitor authorized service disruptions that affect communications networks (CS COPS cell).

13. Monitor and manage the status and performance of data link architectures and networks (CS MOC support cell).

14. Review and monitor the status of repairs on major communications equipment and nodes (CS COPS cell).

15. Provide secure voice, video, and data support to the MOC (CS MOC support cell).

16. Manage the joint restricted frequency list for the commander and subordinates (CS COPS cell).

17. Provide persistent monitoring and management of maritime MTN health and participant status and verification of operational adherence to communications planning and execution documents such as the OPTASK link message (CS MOC support cell).

18. Identify critical CIS infrastructure (military and commercial) requiring protection (CS plans cell).

19. Align CIS to support the commander’s intent and priorities (CS plans cell).

20. Monitor the CIS health and status (CS COPS cell).

22. Determine and report impacts to operations and plans (CS COPS and CS plans cell).

23. Reallocate CIS architecture to support the commander’s intent and priorities (CS plans cell).

24. Determine the cause of outages and localize source of intrusions (CS COPS cell).

25. Mitigate, counter outage or intrusion and restore capability\(^1\) (CS COPS cell).

26. Coordinate closely with the IO cell to deconflict friendly IO in the electromagnetic spectrum.

6.1.2 Composition

1. CIS/NCCC director
2. CIS N/J–6 staff
3. Subordinate organization CIS representatives
4. Maritime intelligence operations center representative
5. Information operations cell representative

6.1.3 Points of Coordination

1. Internal: MOC CFTs.
2. External:
   a. Higher headquarters J–6
   b. Other component commands CIS staffs
   c. Subordinate commanders CIS staffs
   d. Naval component MOC CIS staffs
   e. Commander, Naval Network Warfare Command
   f. Naval and joint CIS supporting commands
   g. Naval computer and telecommunications station staffs
   h. Commander, Tenth Fleet and NNWC watch officers
   i. Combatant commander theater network operations center
   j. Regional SATCOM support center
   k. Regional Navy/Marine Corps spectrum office
   l. Communications security material issuing office representative

\(^1\) C2 of C2 and C2D2E TMs 3-32.3-12 and 3-56.1-12, pgs. 2-7 and 3-xx.
m. National Security Agency representative

n. Joint communications support element.

6.1.4 Inputs

1. Communications status (COMSTAT) reports, communications spot reports (COMSPOTs), casualty reports, e-mail, chat, and voice reports from subordinate commands (CS COPS cell)

2. Electrical sensor indicators from network monitoring tools (CS COPS cell)

3. Indications and warning on potential network attacks (CS COPS cell)

4. Current operations overview as scene-setter and to note communications system impacts to operations (CS COPS cell)

5. Information technology and communications requirements of MOC boards, centers, and cells, including CCIRs (CS MOC support cell)

6. Information technology and communications requirements of subordinate commands (CS COPS cell)

7. Satellite access requests

8. Operations security planning mechanism

9. Restricted frequency list spectrum requests

10. Communications security (electronic key material system) requests

11. Information operations condition alerts

12. Tailored readiness options


14. Combatant command (command authority) theater computer tasking orders.

6.1.5 Outputs

1. Communications and network architectures necessary to support the commander’s plans and operations

2. Staff estimates for COAs

3. Information systems plan for the approved COA

4. Communications architectures necessary to support joint planning group COAs

5. Communications plan for the approved COA

6. Network operations COP event assessments

7. Restricted frequency list spectrum requests

8. Periodic COMSTAT reports

9. Communications spot reports (as required)
10. Annex K of OPLANs/OPORDs

11. Communications and information systems estimate of supportability and signal paragraph of warning, alert, and execute orders

12. Validated satellite access requests

13. Joint restricted frequency list (in coordination with IO and intel)

14. Information assurance/computer network defense incident and compliance reporting

15. Joint spectrum interference resolution

16. Assessment of adversary threat, vulnerability, and impact to maritime force CIS support to maritime command and control.

17. Crisis action standard operating procedures (CASOPS)/preplanned responses for communications and networks to support mission-essential information.

6.2 DENIED/DEGRADED SATELLITE COMMUNICATIONS OPERATIONS

SATCOM bandwidth is a low-density, high-demand asset. During OPLAN execution, when time is of the essence and warfighters are relying on SATCOM for critical C2, timely mitigation of SATCOM outages is required. Preplanned and preapproved COAs provide commanders relying on SATCOM the ability to rapidly react to SATCOM electromagnetic interference/purposeful interference to execute operational tasking.

A degraded SATCOM fallout plan should be developed during strategic OPLAN updates, refined during the CAP phase, and continuously updated during OPLAN execution, taking into account an anticipated denied/degraded SATCOM environment and mission requirements. Prior reference material is available from previous annex Ks, OPTASK COMM orders (SATCOM restoration priorities), and from circuit priority lists developed by combatant command joint SATCOM architecture working groups. COAs must be coordinated with all of the organizations (J–2, J–3, J–6, frequency managers), and the plan should facilitate decentralized execution of operational tasking. Additional deliberate mitigation planning based on available information about the adversary (red force estimates, threat system capabilities, likely geographic laydown, and so forth), will reduce timeliness of response.

During development, planners must anticipate denied and degraded environments and address them throughout the process. The SATCOM manager and CS MOC planners should conduct a review of current SATCOM missions and reassess satellite priority assignments per operational employment. This will ensure proper apportionment of satellite resources for units supporting the OPLAN. Planners ought to create and maintain a list of forces currently supporting the OPLAN and identify and prioritize information exchange requirements for these forces. Then the CS MOC planners, CS COPS, and joint interface control officer can design an effective communications plan with a set of pre-approved backup COAs for degraded communications operations. Some consideration should be given to delegation of authority to subordinate commanders to use judgment to apply COAs and provide a backup means to relay their actions/decisions to HHQ and subordinate units.
CHAPTER 7
Manpower, Personnel, and Administration

7.1 GENERAL

The N1 and/or applicable staff management code is responsible for manpower management, personnel augmentation, personnel accountability, and strength reporting. Personnel services/support, pay and entitlements, postal operations, and morale, welfare, and recreation typically fall under Commander, Navy Installations Command and is monitored by the N1. The N1 monitors casualty reporting as it relates to manning and holds type commanders, fleet commanders, and direct reports accountable for casualty reporting and other personnel support functions, including personnel performance evaluations, awards, and decorations and other personnel services. In addition, the N1 provides support and assistance to the office of primary responsibility with regard to Reserve Component call-up, as well as stop-loss. Further, personnel support for noncombatant evacuation operations and noncombatant repatriation, personnel recovery, and detainee operations are also included in some MOC organizations under N1 when operating jointly with other Service components in task force operations.

The N1 is a key facilitator in the alignment of a command’s billets to the command’s operational mission. Functional leads from within the maritime operations center should work closely with the N1 to define manpower requirements that support mission accomplishment. Through periodic reviews with the functional leads, the N1 obtains necessary information to identify accurate staff officer and enlisted designators/rates, pay grades, Navy officer billet classifications, Navy enlisted classifications, additional qualification designators, and subspecialty codes. Billet change requests and subsequent Total Force Manpower Management System packages are used to implement manpower changes that better align manpower to mission. This process provides the means to send an accurate manpower demand signal to the Navy’s personnel system and deliver the right skills to meet the command’s operational mission. Adjustments that better align billet to mission range from changing aspects of currently authorized billets to requests for increased manpower authorizations. Changes to authorized billets are relatively straightforward and are implemented by positive endorsement by the headquarters’ budget submitting office and approval by Office of the Chief of Naval Operations (OPNAV). Requests to increase manpower authorizations are more complex, require more time to complete and often require offsets from elsewhere or incorporation into a program objective memorandum submission.

N1 participates in all phases of deliberate and crisis action planning to support planning for personnel manpower and manning support to joint operations and collaborate with other staff directors in the preparation of the commander’s estimate and plan development. The N1 also must coordinate with supported combatant/JTF command manpower and personnel division (J–1) on personnel manning and augmentation. Further, the N1 coordinates with other staff directorates, Service components, and outside military and civilian agencies, while also keeping subordinate commanders informed of manning issues and personnel actions that affect their command.

Specific duties and responsibilities of the N1 include:

1. Personnel Accountability and Strength Management: Conduct personnel accountability and strength reporting; monitor and analyze personnel strength data as part of combat readiness assessments.
2. Manpower Management: Facilitate the consolidation and management of manpower requirements for the MOC.
   a. Ensure proper officer staffing of the MOC. The N1 will coordinate with Navy Personnel Command and the appropriate manning control authority to ensure the MOC has adequate manning. This responsibility includes managing appropriate manning documents to ensure resourcing of both active and Reserve personnel.
   b. Initiate required actions to augment staff and force manning during periods of increased operational tempo.
   c. Centrally maintain plans and records for manning and other requirements. This includes all MOC personnel and designated augmentees, active and Reserve.

3. Personnel and Replacement Management: Plan and coordinate personnel procurement and replacements operations in coordination with Commander, U.S. Fleet Forces Command and the combatant commanders.

4. Headquarters Management: When the N1 directorate is organized to provide personnel services, organize and supervise administrative support activities relating to the operation of the MOC.

5. Prepare and process travel orders, country clearances, and manage the travel budget, to include all administrative and personnel service functions.

6. Implement and oversee joint policy and guidelines over all personnel (total force), which includes military active and Reserve Component, civilian, and multinational military and civilian assigned to the commander.

7.2 ADMINISTRATION AND PERSONNEL CELL

An administration and personnel cell may be established to provide required manpower, personnel, and administrative support to operations. If the cell is not established, accomplishment of required tasks is done directly through the N1 and/or staff administration sections.

7.2.1 Functions

Administration and personnel cell functions include:

1. Support the commander’s planning, mission analysis, and COA development as required by the maritime planning group. Support typically includes preparing personnel estimates and proposing personnel guidance and policies.

2. Develop Annex E, Personnel, of plans and orders.

3. Develop manning documents as required.

4. Maintain the commander’s officer and enlisted manning documents.

5. Compile the staff’s requirements for any additional personnel augmentation necessary to support operations.

6. Advise the commander and staff on matters concerning subordinate personnel replacement plans and status.

7. Monitor unit strengths by means of the daily personnel status report and personnel database. The commander must account for personnel assigned or attached to his command and subordinate commanders and report their status to higher headquarters.
8. Inform subordinate units and activities of personnel actions that will affect them.

9. In coordination with the operations and plans centers, develop a rotation scheme for individuals, per the commander’s personnel rotation policy.

10. Support RSOM&I operations by leading personnel reception and through establishment and operation of a personnel reception center, as required.

11. Prepare and submit required personnel and casualty reports and any other message traffic required of the cell.

7.2.2 Composition

The administration and personnel cell is composed of N1 personnel, administration personnel from staff directorates, and led by the N1 directorate. The N1 will provide manpower and manning support, while staff administration personnel provide administrative and personnel services.

7.2.3 Points of Coordination

1. Internal: All CFTs.

2. External:
   a. Higher headquarters commander’s J–1 staff
   b. Subordinate commanders’ N1 staffs
   c. Component commanders’ J–1 staffs.

7.2.4 Inputs

1. Personnel requirements of MOC CFTs

2. HHQ plans, orders, and direction

3. Subordinate reports.

7.2.5 Outputs

1. Personnel status and casualty report

2. Documents for pay, benefits, and entitlements to personnel assigned to the force

3. Annex E of plans and orders

4. The commander’s manning document

5. Rotation plan for individuals assigned to MOC augment billets

6. Personnel casualty reports for individuals assigned to MOC billets.

7.3 TRANSITION TO EMERGENT OPERATIONS

Each fleet headquarters maintains a baseline capability for fleet management and maritime operations that will support the operations tempo required to meet the typical phase zero daily demands of the theater, area of operations, or function. During transition to emergent operations, MOC organizations often require additional capability and capacity than that resident during everyday operations. Personnel transition plans should be based
on mission requirements and take into consideration employment of surge support and/or load sharing as methods to deliver required capability and capacity.

7.3.1 Surge Support

Surge support personnel who physically augment the MOC during emergent operations is a primary means of increasing MOC capability and capacity. Surge support may be provided through individual augmentation, drawing manpower from the Reserve Component, warfare centers of excellence, from other MOCs, or from personnel within the command are assigned other duties. Surge support should be included as part of the organization’s personnel transition plans to support emergent operations and reflected in appropriate manning documents. By-name identification of personnel from subordinate units and assigned Reserve units should be considered in the transition plans. By-name identification of surge personnel facilitates training of augments in their specific roles during regular training and exercise events.

7.3.2 Load Sharing

Load sharing is virtual augmentation or reachback received by a supported MOC from a supporting MOC or some other organization(s) such as a RC operational support center(s) or warfare centers of excellence. Support is provided through various networks and collaborative tools. Support relationships and procedures should be formally established between the MOC and supporting organizations.
APPENDIX A

Key Personnel and Special Staff

A.1 INTRODUCTION

Commanders organize staffs and subordinate forces to accomplish the mission based on assigned mission essential tasks and supported by their vision and mission statement. In addition to the subject matter expertise within the headquarters individual N-codes, a commander has access to the insight and experience of special assistants who report directly to him/her. Special assistants advise the commander, principal staff officers, and directorates as well as support the efforts of the CFTs. The staff composition varies based on mission requirements; this appendix discusses those personal and special staff billets most frequently associated with a maritime headquarters. Information on the personal and special staffs of JTF HQs is included in JP 3-33.

Note

The commander is the only person authorized to direct operational units. If he/she is absent, that duty will be performed by the deputy commander.

A.2 CHIEF OF STAFF

As the key staff integrator, the headquarters chief of staff establishes and manages staff processes and procedures that support the commander’s decision making process and involve principally fleet management tasks.

A.2.1 Functions

1. Coordinating and directing the work of the staff directorates
2. Establishing, monitoring, and revising the battle rhythm to ensure effective information exchange, collaboration, and decision support across the staff and CFT structure
3. Managing the command’s KIM processes, to include serving as chair of the knowledge and information management board
4. Representing the commander, when authorized
5. Implementing the command’s policies as directed by the commander
6. Formulating and disseminating staff policies
7. Ensuring effective liaison is established with the command’s high headquarters, subordinate headquarters, and other critical agencies and organizations
8. Supervising sustainment of the staff and its facilities
9. Supervising staff training and integration programs.
A.2.2 Composition

The COS may have one or more deputies and a secretary of the staff provided to assist in the performance of assigned duties. The secretary of the staff is the executive in the office of the COS and is responsible for routing and forwarding correspondence and papers and maintaining office records.

A.2.3 Points of Coordination

1. Higher, adjacent, and subordinate headquarters
2. N staff
3. CFT organization, as required.

A.2.4 Inputs

1. Direction from the commander
2. Feedback from the CFTs and N staff organizations.

A.2.5 Outputs

Direction and policy guidance for the N staff and MOC director as required

A.3 MARITIME OPERATIONS CENTER DIRECTOR

The position of MOC director is established to ensure one individual is entirely focused on the mission and operational tasks and that the MOC as a whole is functioning as required to ensure successful fulfillment of mission and operational tasks. The MOC director is designated by the commander and is the officer in charge of accomplishing the main functions of operational planning; combat operations; intelligence, surveillance, and reconnaissance; air and sea mobility; and operational sustainability. The MOC director is charged with running the MOC effectively, based on the commander’s guidance, and reports to the commander in that role. At each headquarters, the individual assigned to this position will depend upon the talent and experience resident in the command. Options for assignment as MOC director may include dual-hatting the N3, N5, or other appropriately qualified individuals.

A.3.1 Functions

1. Key MOC integrator.
2. By establishing and managing the MOC processes, he ensures that all activity supports the commander’s decision-making cycle.
3. Oversees and manages the MOC’s BR and supporting information, coordinates with component and subordinate HQ, and represents the commander, when authorized.

A.3.2 Composition

1. MOC director.

A.3.3 Points of Coordination

1. CFTs
2. Commander’s personal staff
3. N staff.
A.3.4 Inputs

1. Direction from the commander and COS
2. Feedback from CFTs and N staff.

A.3.5 Outputs

1. CFT organization products in support of the commander’s decision cycle.

A.4 SPECIAL STAFF

Personal and special staff officers perform duties as prescribed by the commander and handle matters over which the commander wishes to exercise close personal control. The number and type of special assistants to the commander and their duties vary between levels of command; typically, a maritime command at the operational level will consist of the following:

1. Knowledge management officer
2. Public affairs officer
3. Staff judge advocate
4. Chaplain
5. Surgeon.

Naval component commands may include special assistants such as inspector general, political advisor, comptroller, and safety officer. At the JTF level, a provost marshal, headquarters commandant, and historian may also be included. Refer to JP 3-33, Appendix A, for additional information.

A.4.1 Knowledge Management Officer

Knowledge management supports the commander’s decision cycle and efficient day-to-day MOC operations by aligning command processes, information requirements, and available technology to facilitate staff self-synchronization, information exchange, and collaboration as well as to enhance the flow of information across the command and related echelons/services. Knowledge management enhances decisionmaking by supporting shared situational awareness, enabling a common understanding of the commander’s intent, and enhancing the speed and quality of decisionmaking.

The KMO has responsibility for knowledge and information management operations in the MOC and across the staff. These operations include the control of processes linking knowledge and information to the tools that are used to build and provide recommended courses of action to decision makers, to execute operations, to monitor the execution, and to assess the results of those operations. KM/IM operational requirements are captured and communicated in a knowledge and information management plan that identifies to the staff, MOC, and external organizations the critical organizational roles, responsibilities, and processes that support the commander’s decisionmaking. The KMO’s position is a primary duty assigned to a qualified individual, in some cases a senior civilian, with operational experience and a demonstrated understanding of knowledge and information management principles. The KMO is focused on policies and processes. It is critical that the KMO fully understands the command’s information requirements and is authorized to direct actions and process implementations across all directorates. The KMO must be capable of working closely with command personnel of all ranks and specialties to coordinate procedures and capabilities that satisfy the commander’s warfighting requirements and those of the staff. Additionally, the KMO must understand how the staff operates and be able to communicate that understanding to communications and information systems technicians.
A.4.1.1 Functions

1. Performs knowledge and information flow mapping and process analysis to identify the staff activities that directly support the commander’s decisionmaking

2. Assists in the development of the commander’s critical information requirements, and identifies and mitigates chokepoints in the flow of knowledge and information across the staff and across echelons

3. Facilitates the means to acquire, share, exchange, and flow knowledge and information for the commander and staff, as required, to enhance the common understanding of the commander’s intent and situational awareness

4. Facilitates knowledge and information sharing with superior and subordinate command staffs

5. Identifies, develops, aligns, and synchronizes organization-wide processes, business rules, and organizational capital for mission-critical information exchanges

6. Builds staff awareness of how organizational processes interrelate

7. Identifies lessons that point to processes, business practices, and cultural elements that can be modified and/or aligned

8. Develops policies and establishes common knowledge and information capture, information sharing, and collaboration methodologies

9. Facilitates the establishment of collaborative environments and use of associated tools to improve MOC’s ability to conduct planning and operations

10. Monitors and assists in the maintenance of appropriate technological platforms and organizational structures that enhance the staff’s capabilities and capacities to retain and share mission-critical knowledge and information.

A.4.1.2 Composition

The KMO may be supported by a few staff members such as Web administrators, battle rhythm coordinators, and RFI managers. In many MOCs, the KMO does not have designated support during normal operations but often is augmented during increased operational tempos. A couple of MOCs do have designated support staffs that increase the capacity of the command’s KM/IM efforts. The KMO is the lead or co-lead of the KIM WG and the chief action officer to the COS in support of the KIMB. The composition of KIMB and the KIM WG is delineated in section 3.9 of this NTTP.

A.4.1.3 Points of Coordination

The KMO works directly for the commander and reports through the COS.

1. Internal:
   a. All N-code directors and CFT leads.
   b. The KMO coordinates regularly with the IMO (when assigned), CISC/NCCC director, the KIM WG representatives, and KIMB members
2. External:
   a. The KMO coordinates KM/IM efforts with direct support, lower-echelon commands, and upper-echelon as directed by the commander.
   
   b. The KMO participates in joint KM/IM communities of practice.

A.4.1.4 Inputs

1. Direction from the commander, COS, MOC director, and chief knowledge officer, if designated
2. Direction from the KIMB
3. Feedback from the KIM WG
4. Feedback from the command’s lessons learned process
5. Feedback from mission-critical knowledge and information process owners
6. Results of all KM/IM assessments.

A.4.1.5 Outputs

1. KM/IM mission and achievement of desired effects
2. Knowledge and information management plan MOC
3. KM/IM SOP as a standalone document or as a section of CFT SOPs
4. Support to the COS in the development and management of the battle rhythm
5. Layout and functionality of the command’s collaborative information environment
6. Establishment of request, review, and approval process for KM/IM tool acquisition involving the KIMB and KIM WG
7. Information exchange report matrices in the CIE
8. Oversight and guidance for operational KM/IM products, to include RFI, significant event logs, action logs, commander’s intent, mission statement, ROE, commander’s guidance, CCIRs, messages, synchronous collaboration, and lessons learned tools.

A.4.2 Public Affairs Officer

PAOs serve as the commander’s primary advisor on communication with external and internal audiences. PA provides accurate, truthful, and timely unclassified information to key audiences to support achievement of the commander’s objectives. The adherence to accuracy and truth establishes and maintains the credibility of the commander and the force, thereby increasing the potential impact on key audiences. Timeliness further supports that credibility and increases the ability to seize the initiative in the communication environment. Information speed can set context and tone, reinforce messages already disseminated, and counter misinformation and disinformation.

The PAO shall lead all public communication efforts across the staff and coordinate all public communication activities, with the exception of those efforts and activities required to be performed by IO. PA shall not be
considered of the information-related capabilities IO integrates. PA and IO shall, however, keep each other informed of its public information plans and activities. This enables them to deconflict efforts when necessary.

The PAO is responsible for visual information and combat camera planning.

**A.4.2.1 Functions**

1. Review, develop, synchronize, and align public affairs plans, themes, and messages to ensure they are aligned with HHQ guidance throughout the commander’s planning and execution efforts.

2. Advise the commander on potential implications of operational decisions on public perception.

3. Prepare the commander and applicable personnel to address the media prior to arrival in the AO.

4. Participate in MOC CFTs, as appropriate.

5. Develop and approve PA products. PA products will be aligned with U.S. Government, DOD, and Department of the Navy communication objectives and deconflicted with influence-related operations (e.g., information operations and military information support operations).

6. Make available timely and accurate information so that the national and international publics, Congress, and the news media may assess and understand facts about operational activities.

7. Communicate truthful information—good and bad—to internal and external audiences.

8. Coordinate logistics planning for all organic and subordinate PAOs, military Services’ command news teams’ movements, and media travel.

9. Keep the commander, COS, and MOC director informed of potential issues with incoming or outgoing PAOs or media travel.

10. Provide updates about scheduled media embarks and distinguished visitor embarks aboard ship.

11. Plan for and coordinate embedded media in the command.

12. Act as point of contact for all media inquiries and press releases.

**A.4.2.2 Composition**

The PA office is staffed to provide appropriate counsel to the commander and support/coordinate PA communication efforts with higher headquarters and component commands.

**A.4.2.3 Points of Coordination**

1. Internal:
   a. Commander, deputy commander (direct access)
   b. Chief of staff, MOC director, N-code directors
   c. Current operations cell
   d. Future operations cell
   e. Maritime planning group
   f. Information operations cell
g. Maritime assessment group
h. Knowledge and information management WG
i. Other CFTs.

2. External:
   a. Senior and subordinate PAOs
   b. Component PAOs
   c. Allied PAOs
   d. Civilian media organization
   e. Other Government agencies.

A.4.2.4 Inputs

1. Plan(s)
2. Working groups
3. Time-phased force and deployment data and requests for forces
4. Media clips
5. Higher headquarters’ PA guidance, talking points, and response to queries
6. Assessments.

A.4.2.5 Outputs

1. Current TPFDD and request for forces for PA/visual information manning and military services’ command news teams’ visits to operating area.
2. PA products including, but not limited to, communication plans, visual imagery plans, public affairs guidance, talking points, response to queries, news releases, and visual imagery.
3. Media engagements to include press conferences, press briefings, and interviews.
4. Social media: Post and provide updates to command Web and social sites, interact with the public, military families, and media through command social media sites.
5. Public affairs/communication update to the CUB on how recent and planned events may impact public opinion.
6. Assessments.

A.4.3 Staff Judge Advocate

The SJA serves as primary advisor to the commander, headquarters staff, and the MOC on all legal matters, including ROE; RUF; DOD law of war program; domestic, foreign, and international law; treaties; status-of-forces agreements, etc. As the SJA supports the N-codes and the CFTs, he/she must be conversant, not only with
the law, but also with the assigned mission, the commander’s intent and concept of operations, identified courses of action, and MOC processes and procedures.

**A.4.3.1 Functions**

1. Organize the SJA’s office to meet the command’s mission-specific requirements. The office must provide the mix of legal SMEs necessary to fully support the commander and the mission.

2. Provide legal advice and support to the commander and staff on operational law, international law, military justice, claims, legal assistance, administrative law, environmental law, and rule of law operations.

3. Provide legal advice to CFTs across the various staff sections covering the full spectrum of operations including, but not limited to, participation in the planning group, targeting boards, current and future operations cells, the information operations cell, contracting and acquisition boards, detention review boards, civil support teams, and reconstruction boards.

4. Serve as a single point of contact for subordinate SJAs regarding legal matters affecting forces assigned or attached to the command.

5. Provide assistance with drafting command policies, orders, and international agreements.

6. Ensure all plans, ROE, RUF, policies, and directives are consistent with DOD law of war program and domestic and international law.

7. Coordinate and oversee command and subordinate ROE and RUF training.

8. Assist in resolving claims for compensation by foreign personnel within the area of operations.

9. Assist in resolving cases where foreign authorities assert criminal jurisdiction over U.S. forces within the area of operations.

10. Be involved throughout the planning process, including COA development and development of Appendix 8, ROE, to Annex C of the OPLAN/OPORD.

11. Develop the legal estimate during the planning process.

12. Provide target legal review in conjunction with targeting process collateral damage estimation.

13. Provide input to the maritime intelligence operations center for the development of the IPOE.

For further details concerning legal support, refer to JP 3-33; JP 1-04, Legal Support to Military Operations; NWP 1-14M, The Commander’s Handbook on the Law of Naval Operations; and JP 2-01.3.

**A.4.3.2 Composition**

The SJA’s office is staffed by an experienced staff judge advocate and such subordinate SJAs and legal staff as are warranted by the size, scope, and workload of the organization. The SJA requires reliable connectivity to legal personnel up and down the chain of command.

**A.4.3.3 Points of Coordination**

1. Internal:
   
   a. Maritime targeting coordination board

   b. ROE/RUF working group
c. Maritime operations center daily briefing and other meetings and boards, in person or virtually
d. The commander’s daily update
e. Watch change-over briefing
f. Information operations cell
g. Maritime intelligence operations center
h. Maritime planning group
i. Operational planning teams, as required
j. Knowledge and information management WG.

2. External:
   a. Senior
   b. Subordinate
   c. Peer SJAs.

A.4.3.4 Inputs

1. Plans and orders
2. Higher headquarters guidance
3. Treaties
4. Status-of-forces agreements
5. Rules of engagement request/authorization messages.

A.4.3.5 Outputs

1. Target legal reviews
2. Legal advice to MOC and other SJAs
3. Coordination of effort with other SJAs
4. ROE/RUF
5. Appendix 8 to Annex C of OPLANs/OPORDs
6. Staff estimates of supportability for COAs/CONOPS.
A.4.4 Chaplain

The chaplain is the principal advisor to the commander on religious, moral, and morale matters. The chaplain has the responsibility to plan and coordinate the provision of religious ministry (RM) within the fleet or task force. The two primary tasks of the chaplain are to:

1. Provide or perform direct personal religious support
2. Include advising the commander and staff on moral and ethical decisionmaking
3. Advise the commander and staff on the religious dynamics of the indigenous population in the operational area.

When authorized by the fleet or task force commander, outside of combat operations, religious ministry teams may be involved in interagency contacts and coordination and should have an understanding of the religious demographics in the host nation as well as OGAs, NGOs, and IGOs.

A.4.4.1 Functions

1. Develop religious support plans in support of the operation at the fleet and task force religious ministry levels. This includes preparation of Appendix 6 to Annex E of the commander’s OPLAN/OPORDs.

2. Identify religious ministry team requirements to support operations, including:
   a. Emergent augmentation needs and gaps in personnel staffing and requirements.
   b. Facilities, equipment, transportation, and communication requirements.

3. Coordinate the provision of religious support teams to provide the most comprehensive religious support possible, to include:
   a. Coordinating religious support with task force and subordinate command chaplains
   b. Maintaining liaison with the chaplains of multinational forces and appropriate HN military and civilian religious leaders
   c. Coordinating appropriate training for religious ministry teams.

4. Coordinate with the other staff sections to ensure sufficient religious support assets are available to support combat forces, medical services, civilian detainees, prisoners of war, and others.

5. Provide religious support and pastoral care to DOD-authorized personnel in and out of uniform.

6. Determine when RM information is required and how soon can it be obtained.

A.4.4.2 Composition

The chaplain has a small RM support staff and reliable connectivity with all superior, peer, and subordinate RM personnel.

A.4.4.3 Points of Coordination

1. Internal:
   a. Public affairs officer
b. Knowledge and information WG

c. CFTs involved in planning and operations

d. All individual personnel.

2. External:

a. Task force and joint/combined component religious support POCs

b. Subordinate RM resources

c. Other governmental agencies, NGOs, IGOs, HN POCs.

A.4.4.4 Inputs

1. Personnel, religious, and indigenous cultural information impacting military operations

2. Inter-Service support agreements and memorandums of understanding, providing RM to organizations outside the headquarters

3. Religious ministry information for ROE development


A.4.4.5 Outputs

1. Appendix 6 to Annex E for all plans and orders

2. Religious and cultural briefs.

For more detailed responsibilities of the chaplain, refer to JP 1-05, Religious Support in Joint Operations, and NWP 1-05, Religious Ministry in the U.S. Navy.

A.4.5 Fleet Surgeon and Health Service Support Cell

The surgeon serves as the principal medical advisor to the commander on health matters and employment of medical forces of a maritime component commander. Reporting directly to the commander, the surgeon provides leadership, oversight, and management of all operational HSS and force health protection (FHP) policies and programs designed to protect and sustain the health of the forces in support of MOC operations. The surgeon is also responsible for the planning and deployment of sufficient medical assets throughout the AO in order to provide adequate medical care and patient movement capabilities in support of the commander’s operational mission. The surgeon establishes conditions that allow HSS providers to deploy capabilities of care that include first response, en route, forward resuscitative care, and hospitalization. Force health protection complements force protection and is defined as all measures taken by commanders, leaders, individual Service members, and the military health system to promote and conserve the mental and physical well-being of Service members across the range of military operations. These measures enable the fielding of a healthy and fit force, prevention of injuries and illness, protection of the force from health threats, and the provision of excellent medical and rehabilitative care to those who become sick or injured anywhere in the world. Working with higher headquarters surgeons, the surgeon assesses HSS and FHP requirements and capabilities (both quantitatively and qualitatively) and provides recommendations to the commander. The HSS cell will provide HSS expertise support to the following CFTs:

1. Maritime operations center/battlewatch

2. Operational planning group
3. Current operations

4. Future operations

5. Future plans center (as needed)

6. Logistics readiness center

7. Other boards, centers and cells and working groups, as directed/required.

A.4.5.1 Functions

1. Advise the commander concerning the following:
   a. The health of the force, such as disease and non-battle injury/battle injury rates
   b. Prevention and protection measures and procedures
   c. Health surveillance, including medical, occupational, and environmental
   d. Emergent medical crisis involving Navy forces under the maritime component commander’s command and control
   e. Medical aspects to crisis operations, as required
   f. The treatment and evacuation (medical evacuation/casualty evacuation) of all eligible personnel

2. Ensure membership and required medical liaison relationships to appropriate MOC CFTs and internal headquarters organizations to coordinate FHP and HSS issues

3. Determine MOC HSS cell requirements for continuous 24-hour operations when required.

4. Assist subordinate commands in identifying FHP and HSS requirements are sustained

5. Oversee all aspects associated with the medical Navy mission-essential tasks (NTA 4.12 series, Provide Health Services) to ensure optimal health readiness of the population at risk, to include U.S. forces and other eligible personnel

6. Prepare Annex Q, Medical Services, for OPLANs/OPORDs in coordination with the LRC

7. Direct and standardize maritime medical services and responsibilities within the maritime component commander’s area of operations.

A.4.5.2 Composition

The HSS cell is staffed and task-organized based on the mission and possesses the requisite expertise to adequately manage several functional areas. Some of these positions may be combined as necessary and as appropriate to the mission. The typical composition for the HSS cell is as follows:

1. Fleet surgeon
2. Deputy fleet surgeon/medical planner
3. Fleet independent duty corpsman (two)
4. Environmental health officer
5. Preventive medicine technician.
Additional positions required of a numbered fleet in the role of functional component commander (e.g., JFMCC):

1. Current operations, future operations, and MPG medical planners
2. Medical watch standers
3. Medical logistics officer
4. Armed services blood program officer
5. Medical regulating control officer.

A.4.5.3 Points of Coordination

1. Internal:
   a. Health service logistical support cell
   b. Maritime planning group
   c. Future operations
   d. Current operations
   e. Administration personnel cell
   f. Logistics readiness center
   g. Knowledge and information management WG.

2. External:
   a. Higher headquarters surgeons and staffs
   b. Component surgeons and staffs when direct liaison is authorized
   c. Subordinate surgeons and HSS units’ senior medical department representatives
   d. Other agencies and commands, as required, coordinating execution of medical tasks.

A.4.5.4 Inputs

1. Medical Concept of Support from maritime component group surgeons and senior medical officers
2. Health services portion of a unit’s daily situation report
3. Daily medical reporting requirements from subordinate units
4. After action reviews/lessons learned.

A.4.5.5 Outputs

1. Annex Q, Medical Services, for OPLANs/OPORDs
2. Health services portion of the daily SITREP
3. Daily medical reporting requirements to HHQ surgeon

4. Medical staff estimates to crisis action planning team leads, when required

5. Consolidated medical casualty and patient evacuation reports

6. After action reviews/lessons learned.

For more details concerning HSS, refer to JP 3-33; JP 4-02, Health Service Support; the U.S. Joint Task Force Training Manual; NWP 4-02 series, Health Protection; and the universal naval task list (UNTL) instructions.
APPENDIX B

Liaison

B.1 BACKGROUND

Liaison is the contact or intercommunications maintained between elements of military forces or other agencies to ensure mutual understanding and unity of purpose and action. Liaison—usually accomplished through direct communication—reduces friction between units. Exchanging liaison officers is the most commonly employed technique for establishing and maintaining close, continuous, physical communications between commands.

Liaison officers may be exchanged between higher, lower, or adjacent units. The exchange of LNOs between United States and coalition military organizations should be reciprocal. Additionally, LNOs may be provided from and to Government agencies, nongovernmental organizations, or international organizations.

B.2 LIAISON ROLES

The liaison officer is the personal and official representative of the sending organization’s commander and should be authorized direct face-to-face liaison with the commander. As such, the LNO must have the special confidence of both the sending organization and the receiving commander. The LNO supports the headquarters and can serve as a conduit of critical information to the commander and MOC. However, the LNO’s chain of command is different from that of augmentees to the MOC. Like representatives from other commands that may provide short-term assistance with a planning effort, the LNO remains in the chain of command of the sending organization.

Because of the LNO’s broad functions, it is frequently—but incorrectly—assumed that liaison officers fill a staff role; roles more appropriately filled by augmentees serving as full-time planners, watch officers, or staff directorate personnel. While LNOs are closely involved in the planning process and with activities within the MOC, their function is not the same as an augmente.

Liaison officers are often identified as on-call representatives to the MPG and called for when specific component or subject matter input is required but should not be considered full-time planners. While planning is one subset of the four functions performed by LNOs, it should not dominate the LNO’s time or preclude accomplishment of other LNO functions. The LNO must retain the flexibility and freedom of action to accomplish other functions, and should not fill a staff billet better filled by a full-time planner.

The fleet command center is the logical location for liaison officers to monitor the execution of MOC operations and coordinate with various other functional area representatives. While an LNO may be located in the FCC, they should not be expected to fulfill the responsibilities of a full-time watch officer. Liaison officer functions require a presence in many locations throughout the headquarters.

LNOs provide an effective means for coordinating communication between the sending and receiving commands but they should not be a substitute for the use of normal C2 channels. The fact that the LNOs have relayed information to their respective organizations does not relieve the MOC of the responsibility to promulgate operational information through normal and more formal communication channels.
B.3 RECEIVING UNIT RESPONSIBILITIES

B.3.1 Identifying LNO Requirements

The receiving unit should identify and define requirements for the LNO or LNO team based on mission requirements and established command relationships. Requirements may include:

1. Rank: The receiving unit may specify the rank desired based on the rank structure of the receiving unit or the level of responsibility and decision-making capability expected by the receiving commander.

2. Weapon system specialty: The receiving unit may request a specific military operating specialty or weapon system expertise.

3. Experience: Specific experience within a specialty may be desired.

4. Security clearance requirements: Top secret/sensitive compartmented information clearances may be required but are not the norm in many sending units. Receiving units must identify security clearance requirements to all sending commands.

5. Unique administrative and reporting requirements: The receiving unit may have unique administrative requirements for liaison officers that may include medical, passport, country clearance and equipment considerations.

B.3.2 Support Requirements

The receiving organization should provide suitable accommodations for LNOs to function within the headquarters. Considerations include:

1. Arrange for billeting and messing. Ensure billeting and messing arrangements are made for the LNO or LNO team.

2. Address manpower limitations. Clearly identify any existing manning limitations. For example, some Navy vessels have limited female berthing or there may be limited workspace available.

3. Workspaces for the LNO or LNO team. Ensure that sufficient workspaces are provided for the LNO or LNO team. Allocate sufficient space for the number of liaison personnel and provide access to adequate communications and ADP equipment, telephones, and administrative supplies.

4. Provide administrative and service support. Ensure that LNOs have access to appropriate administrative support and services.

5. Provide publications and documents to the LNOs. Ensure that the LNO or LNO team has access to sufficient publications and documents to accomplish their mission. Examples of useful documents include:
   a. Maritime operations center SOPs
   b. Building and area maps
   c. Command organization chart with names, office symbols, and phone numbers
   d. Doctrine publications and reference materials.
B.3.3 Joining Instructions

Joining instructions should include, at a minimum, the following:

a. Reporting time: The receiving command should tell sending units the earliest time the LNO or LNO team may report. Actual reporting time may be identified by any mutually agreed-upon method. Some of the more common times include by phase of the operation, on a specific date/time, or when a certain critical event occurs.

b. Reporting location: The receiving command should tell the sending unit where to send their LNOs. This might be a specific geographic location, a street address, a specific port of debarkation, a railhead or train station, a set of geographic coordinates, or merely the name of the headquarters, if commonly known.

c. Unique administrative and training requirements: The receiving command should delineate unique or unusual administrative and training requirements. These might include any of the items previously mentioned.

B.3.4 Reception and Staff Integration

Critical to the successful reception and integration of the LNO or LNO team into the headquarters is identifying a single staff POC assigned the responsibility of ensuring that the LNOs understand the MOC’s operating procedures and the command expectations. Additionally, this single staff point of contact should have a plan to assimilate the LNOs quickly into the headquarters. A recommended staff point of contact is the chief of staff. The special role and functions performed by the LNO or LNO team, as well as the access they require to the commander, require the visibility and oversight of someone in the command group. The COS is normally the single best point of contact to ensure that LNOs are welcomed by the staff and have the access needed to perform their functions. The reception and integration plan should specify how to accomplish the following:

1. Update the situation. Brief arriving liaison officers on the command’s situation and mission, with particular emphasis on any changes since the LNO’s departure from the sending unit.

2. Provide access to unit and individual training. Although it is the LNO’s responsibility to complete all required or desired unit or individual training (for example: marksmanship and communications familiarization) before departing from the parent organization, sometimes that training is not available due to scheduling or time constraints. If it is critical to the success of the LNO, specified training should be provided as soon as possible by the receiving organization.

3. Issue and provide training on equipment. Issue any required individual equipment that may be unique to the operational environment the LNO may be working in (for example: emergency escape breathing device, life preserver, etc.).

4. Orient the LNO to the command. The LNO should be given an orientation to the receiving command facilities and location.

5. Provide access to key groups. Ensure that the LNO has access to the receiving unit’s key command and staff groups. An in-brief with the commander may be appropriate. Ensure that the command relationship and chains of command among the LNO, the receiving unit, and the sending unit are clearly understood by all concerned.

6. Identify briefings and meetings the LNO should attend. Inform the LNO of the receiving unit daily operational schedule to facilitate the LNO’s ability to gather and disseminate information.

7. Identify LNO briefing requirements. Inform the LNO of any requirement to speak at meetings or briefings.
8. Identify information reporting procedures. Identify the timing of any required reports that must be provided by or to the LNO.

9. Include the LNO in the planning process. Ensure that the LNO is included as a representative of the sending organization during the collaborative planning process.

B.4 SENDING ORGANIZATION RESPONSIBILITIES AND CONSIDERATIONS

During the planning phase of an operation, liaison requirements between components and coalition partners will become more self-evident. Generally, a supporting commander should position an LNO at the headquarters of a supported commander.

B.4.1 Defining the LNO Mission

a. Responsibilities: The sending command briefs the LNO on his or her specific responsibilities and may formalize them in writing. Additionally, the command should specify what decision-making authority it wishes to grant to the LNO. It is useful to document any decision-making authority in writing with a copy furnished to the receiving command.

b. Determine LNO team size and grade structure: The size of the LNO team may vary from one person to more than 10, depending on the staffing requirements of the mission. While grade structure of the LNO or LNO team is normally determined by the sending organization, the senior liaison officer must be senior enough to deal effectively with the MOC headquarters staff principals. Coordination between the sending and receiving commands is essential to ensure that the LNO or LNO team is of the right size and seniority to accomplish the LNO mission.

c. Timing: As a general rule, the sooner the LNO or LNO team can be sent, the better. Early arrival may enable the LNO or LNO team to become familiar with the receiving command before critical operations occur.

B.4.2 LNO Selection Considerations

a. Personal skills: To increase effectiveness, the LNO should possess positive personal traits including abilities as a briefer, tact, excellent interpersonal skills, proactive and straightforward.

b. Command/commander familiarization: The LNO should be intimately familiar with the sending organization. As the commander’s representative, the LNO should have an awareness of the commander’s thought processes and completely comprehend the commander’s intent. Additionally, the LNO must be familiar with the sending command’s organization and SOPs in order to streamline communications procedures and expeditiously solve problems.

c. Administrative and special requirements: The sending component must ensure that the selected LNO meets the requirements of the receiving organization to include security clearance, passport, country clearance, and foreign language proficiency as applicable.

B.4.3 Preparing and Training the LNO

Each component command must anticipate the requirement to provide an LNO or LNO team to another command. Preparing and training LNOs must be viewed as a long-term investment to ensure mission success in the event of a contingency.
B.5 LIAISON OFFICER RESPONSIBILITIES

B.5.1 Before Deployment

Adequate preparation and coordination is key to the success of the liaison activity. The LNO must be an integral part of the planning process and fully understand the sending organization commander’s intent. Before deployment, the LNO should:

a. Completely understand the mission, the LNO function, the commander’s expectations, the LNO’s specific responsibilities to the sending and receiving organizations, and the command relationship that will exist between the sending and receiving organizations and among the other major commands participating in the operation.

b. Become familiar with potential issues of the sending command, including specific issues and information requirements from each staff section.

c. Know the current situation of the sending organization, including the sending organization commander’s intent, commander’s critical information requirements, TPFDD issues, and the commander’s concept of operations.

d. Contact the receiving organization headquarters to determine if there are any special requirements, including equipment, OPSEC applicable to the mission, arrangements for communications and transportation, credentials for identification, appropriate security clearances or documents, and any peculiar requirements (language, interpreter, customs, etc.) associated with multinational units, if applicable. The receiving unit may or may not publish joining instructions.

e. Become familiar with the capabilities, employment doctrine, and operational procedures of the sending and receiving organizations.

f. Prepare a command-specific capabilities and limitations briefing (for example: unit locations, combat readiness factors, personnel strengths, logistics considerations, map overlays, etc.) for presentation to the receiving commander and staff.

g. If assigned to a headquarters of a foreign nation, become familiar with that nation’s customs, as well as with the peculiarities of the headquarters. Additionally, when working in a multinational headquarters, the LNO must clearly understand alliance or international agreements that govern the participation of Allied forces in the operation.

B.5.2 During Deployment

Upon arrival, the LNO in-processes and verifies the concept of operations with the commander and staff. The LNO integrates with the staff and begins to perform his or her duties, as required. Specific responsibilities include:

a. Report to the commander and/or the staff principal who has cognizance over liaison personnel.

b. Identify what daily and special briefings to attend and establish a schedule for reporting information and providing situation updates to the sending and receiving organizations.

c. Quickly establish rapport with the commander and staff. Identify issues between the sending and receiving organizations that are evident upon arrival and address them with the appropriate staff directorates. Determine how the sending organization will be employed (for example: mission, unit location, future locations, future operations, commander’s intent, etc.) and report on all matters within the scope of the mission at hand.

d. Establish communications with the sending organization. Regularly report to the sending organization, providing any information deemed appropriate.
B.5.3 LNOs Exchanged Between Components

Liaison officers exchanged between other organizations and the MOC may include:

1. Special operations liaison element (SOLE): A SOLE is typically a joint team provided by the JFSOCC to the JFACC (if designated) or appropriate Service component air C2 organization to coordinate, deconflict, and integrate special operations air, surface, and subsurface operations with conventional air operations. The SOLE director works directly for the JFSOCC/commander, joint special operations task force as a liaison and has no command authority for mission tasking, planning, and execution. The SOLE director places special operations forces (SOF) ground, maritime, and air liaison personnel in the joint air operations center to coordinate, deconflict, and synchronize SOF with conventional air operations.

2. SOF liaison officers report to the SOF commander or SOF component commander and are dispatched to applicable conventional JTF components to ensure the timely exchange of necessary operational and support information to aid mission execution and preclude fratricide, duplication of effort, disruption of ongoing operations, or loss of intelligence sources. SOF LNOs may assist in the coordination of fire support, overflight, aerial refueling, targeting, deception, MISO, civil affairs operations, and other operational issues based on current and future special operations missions. These efforts are crucial to the JFC’s unity of effort, tempo, and coordination of limited resources and assets.

3. Marine Liaison Officer (MARLO): The MARLO is the Marine Corps commander’s representative within the MOC and is responsive to the commander on matters pertaining to USMC operations. The MARLO provides feedback to organizations within the MOC on current and future operations concerning integration of force requirements.

4. Air Component Coordination Element (ACCE): The ACCE is the JFACC’s primary liaison and personal representative to the MOC. The ACCE performs a liaison function and is responsible for understanding and participating, when possible, in initial planning for the JFACC and for understanding the JFMCC plans. The ACCE team works with its respective counterparts in the air operations center to provide the MOC with information on the best way to employ air and space power. This is a two-way relationship in that the ACCE not only provides information and flow to the JFACC but must also help ensure that JFACC information is flowing to the MOC.

5. Other Service and functional component/JTF liaisons: The MOC may send or receive other liaison to support operations, to include United States Coast Guard, DIA, National Security Agency, Central Intelligence Agency, Drug Enforcement Administration, United States Citizenship and Immigration Services, United States Customs and Border Protection, Federal Aviation Administration, or other Federal agencies or departments and Allied personnel in various operational and support areas.

6. There are various joint enabling capabilities, including command and control, public affairs, and communications support. These capabilities can be provided by the joint public affairs support element and the joint communications support element.
APPENDIX C

Maritime Operations Center Organization and Augmentation

C.1 INTRODUCTION

This NTTP recognizes that commanders will, to some extent, customize their staffs and subordinate forces as they deem necessary to accomplish their CCDR-assigned missions. The MOC organizational construct is designed to present a consistent organizational structure to joint mission partners and allow for the development of common doctrine, training, and materiel solutions that promote more effective and efficient MOC processes at the operational level of warfare.

This appendix discusses the following:

1. Organizational practices that enable MOCs to perform a wide range of missions with a diverse set of mission partners
2. MOC augmentation practices that allow MOCs to increase their capability and capacity as needed
3. Example scenarios that illustrate how these practices are integrated support in the flexible, tailorable, and scalable MOC (functionally depicted in figure C-1).

C.2 MOC ORGANIZATIONAL CONSTRUCT

The flexible, tailorable, and scalable MOC construct facilitates staff functions that support the commander’s decisionmaking in whichever role he/she has: joint force maritime component commander, Navy component commander, or numbered fleet commander. It provides capabilities that encompass the commander’s decision cycle: plan-direct-monitor-assess (PDMA). A MOC achieves these purposes through its capacity to adapt to escalating scenarios through augmentation and a flexible, tailorable, and scalable organizational structure. This appendix describes, but does not prescribe, a notional organizational construct.

The MOC has matured over time. Maritime operations center is the construct by which a maritime commander organizes a maritime headquarters to facilitate decisionmaking to exercise command and control of forces at the operational level of war. The MOC includes the commander, the entire headquarters staff (including special assistants), and related operations and fleet management processes.

As discussed in section 1.3, the MOC has two main elements: functional elements (directorates, centers, divisions, cells, elements, and teams); and cross-functional elements (boards, groups, and working groups). These two groups of elements work together to develop the plans, orders, guidance, and assessments required to support the commander’s C2 requirements. These elements combine through battle rhythm events to sustain operations across all assigned missions. Therefore, the MOC organization is constructed along a matrix scheme that supports a wide range of missions.

Figure C-1 depicts the organization attributes of the MOC construct that allows it to simultaneously support multiple missions at differing levels of activity. Flexibility refers to the commander’s ability to apportion staff between the two functional areas of operations and fleet management.

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1 Joint Chiefs of Staff, Joint Publication 3-33, Joint Task Force Headquarters, 30 July 2012, pg. IV-16.
Tailorable speaks to the specific combination of organizational elements to address mission objectives. These topics will be defined in more detail, but the size and composition of organizational elements changes dynamically to serve uniqueness within the region, force structure, and mission objectives.

Scalable addresses the fact that both the capacity and capability may be increased or decreased to support mission accomplishment. This involves the quantity of people and equipment, specific skills and training, and specialized systems. For example, host-nation support after a natural disaster usually requires more logistics functions and, therefore, more logistics trained personnel, whereas cleanup from an inadvertent spill of radioactive material would require more medical and radiological planners and planning tools.

C.2.1 Functional Elements

Functional staff directorates make up the core of the MOC. These directorates are organized and identified by the classic N-code structure and are each led by a director, typically a senior functional area expert. These directorates are the primary process owners. They manage information and personnel within their functional lanes. Personnel in the MOC will typically be assigned to a billet in a division, center, or office within one of these directors. The lower half of figure C-2 presents these directorates and a common set of notional subordinate staff elements assigned to each directorate. Additional staff directorates and subordinate elements can be added as the commander’s missions change or new missions emerge.
The staff directors resource the commander’s battle rhythm with manpower and information. They must therefore make resourcing decisions to apportion their resources between various organizational elements and across the multiple lines of operation to meet the commander’s guidance and priorities. The directors:

1. Report to the chief of staff for resourcing of their functional directorates

2. Provide functional resources to the MOC director for battle rhythm events and cross-functional elements across the commander’s lines of operation.

The NCC/NFC’s missions, functions and tasks, which are used to establish what their staffs need to do, are the basis for the MOC’s manning, training, and equipping requirements and associated AMD development and validation. The AMD details the MOC’s normal operations manpower requirements. A Navy Manpower Analysis Center team or USFF Command Manpower Assessment Team evaluates the proper manning of the MOC functional staff by billets assigned within the directorate structure.

As depicted in figure C-2, some directorates have a center that aids their directors in managing the activities of the directorate, supports the principal activity of the directorate, and provides focus on the development of situational awareness and the generation of functional knowledge that will be used by the MOC’s other boards, bureaus, centers, cells and work groups.

Figure C-2. MOC Organization
The staff of a directorate does not have to be co-located; the directorate’s personnel can be distributed in a combination of reachback and forward ashore and afloat elements based on the joint force commander’s intent, priorities, and scheme of maneuver. All elements are synchronized through the battle rhythm to meet the knowledge and information needs of the commander and staff.

C.2.2 Cross-functional Elements

While a core set of CFTs will likely be established within a MOC, the MOC’s CFT structure, organization, and staffing may vary depending on the missions assigned, the operational environment, the makeup of existing and potential adversaries or nature of the crisis (e.g., combat operations, tsunami, cyclone, earthquake), and the time available to reach the desired end state. Each CFT has an assigned lead and director with principal oversight responsibility (figure C-2). These CFTs can be supported by participants who are present physically or virtually. This may include members from mission partners up, down, and across the force.

The commander’s decision cycle, defined in JP 3-33 and implemented by the MOC construct, provides a way for commanders to organize the staff to promote decision superiority across a wide range of operations. It provides a process flow that describes: how command and staff elements determine required inputs/process/outputs and actions, codifies these inputs/process/outputs and actions in directives, executes them, and monitors their results. Specific organizational elements support each of the four PDMA components, providing the commander wide exposure to staff perspectives and subject matter expertise. The battle rhythm is a repeatable set of activities over time— independent of the planning horizons—that enable the staff to provide focused perspectives to support the commander’s decisionmaking.

The MOC and the battle rhythm support the commander’s decisionmaking and are controlled by the MOC director. Cells and groups form the backbone of the decision cycle. Thus, the maritime planning group and future plans cell conduct planning; the future operations cell conducts operational-level planning for near-term operations and for branches to plans; the current operations cell focuses primarily on monitoring and assessing ongoing operations and the execution of the commander’s intentions; and the maritime assessment group assesses effects and tasks. Although not all commands will constitute the same organizational structure, this NTTP establishes the basic lineup. Additional CFTs may be added to meet emerging requirements. These are depicted in the upper half of figure C-2 and more fully described in the main document as well.

C.2.3 Cross-functional Element Composition

Although cross-functional in their membership, most centers, groups, cells, elements, boards, WGs, and planning teams fall under the principal oversight of the staff directorates. Senior leaders from directorates will typically chair or participate within the boards, groups, and working groups for which they are responsible. However, the MOC director ensures adequate resourcing of cross-functional organizational elements and sufficient output in each functional lane to meet mission requirements.

Additional personnel may be sourced from other directorates to support the CFTs. Typically, staff who are more focused on fleet management functions can be used to support various boards, groups, and working groups. The seven-minute drill process ensures the appropriate mix of functional expertise is identified, coordinated, and made available. The seven-minute drill seeks to balance the potentially large number of CFTs desired for full staff analysis and integration with the limited number of personnel on the staff, time available, and other competing scheduling requirements for the principals and leaders. The directors must assess mission requirements and propose appropriate CFTs for the MOC organization to the MOC director. This process eliminates duplication and conflicting CFTs within the battle rhythm. The goal of this process is to create a battle rhythm that most effectively feeds the commander’s decision cycle and allows MOC the time to think and produce quality products rather than just jumping from meeting to meeting for no real purpose.
C.3 AUGMENTATION

Sometimes during heightened operations, MOC manning increases to accommodate heavier demands for decisions, guidance, plans, and orders. For example, as battle rhythm tempo and timing demands increase, the volume of ISR information can dramatically increase. There are several ways that the MOC structure can flex to provide the necessary output. These methods range from requesting additional personnel to collaboration with centers of excellence. Figure C-3 depicts these forms of augmentation.

Directorates conduct mission analysis and then provide the N1 with manpower requirements needed above the current AMD levels to meet the staff needs in support of mission accomplishment. These needs are captured in appropriate manning documents. These manpower requirements identify, to the greatest extent possible, the knowledge and skills required as well as rank and/or experience level necessary. The N1, working in concert with the JTF, CCDR, USFF, and OPNAV staffs, attempts to source the necessary additional manpower requested. There are several sources for additional manpower that will be discussed next. These additional personnel integrate with the day-to-day operations staff to support the set of cross-functional staff elements and battle rhythm during heightened operations. The green upward arrow in figure C-3 depicts the normal flow of staff from the directorates into the cross-functional elements.
Figure C-3. MOC Organization Augmentation
C.3.1 Self-augmentation/First Responders

As shown in figure C-3, MOCs have the ability to move additional manpower between staff codes, typically from the fleet management functions, into the operations functions; this personnel reassignment is considered self-augmentation. The MOC may also extend work shifts in order to have sufficient manpower to meet demand.

Subordinates and higher headquarters rely on the MOC’s ability to quickly provide staffed products on behalf of their commander. During the transition to heightened operations, the NCC/NFC, supported solely by their MOC, must, by necessity, lead the way by providing decisions and guidance, plans, and orders without first waiting for augmentation to arrive.

One initiative used at MOCs to build on self-augmentation includes use of a contingency manning document that predetermines which members of the staff will surge into particular positions in support of staff operations. These first responders allow the MOC to quickly transition to heightened operations. The original day-to-day work being performed by the first responders is gapped until additional augmentation can arrive to allow them to return to their normal duties.

Self-augmentation buys time for the MOC until the external augmentation transits to theater and integrates into the MOC. This can require several days—and at times weeks—as augmentees are located, assembled, outfitted, transported, and in-processed. Self-augmentation is not new; it merely acknowledges how MOC apply resources where they are needed most.

C.3.2 Individual Augmentation

In many cases, specific skills or experiences are required to support the MOC in the form of individual augmentation. Requests are sent to the Services, asking for the specific type of expertise and experience level required. For example, the MOC may lack an expert in space planning and may request that another command provide a person with this particular expertise. Individual augmentation may also be requested for additional personnel simply to add capacity to the MOC to support sustained 24/7 heightened operations. These individual augments often require time to turnover current duties, travel to the MOC, and integrate within the MOC through the N1 reception process.

C.3.3 Reserve Augmentation

Also shown in figure C-3, the Reserve Component is a source for MOC augmentation. RC augmentation can take the form of either individual mobilizations or augmentation by an entire unit, depending on the mission and the particular functions needed. For example, to augment the battle watch team within COPS, individual augmentees are often trained on watch procedures and then assigned to a watch rotation.

C.3.4 Joint Augmentation

During some operations, certain capabilities will be provided by other services in support maritime operations. For example, MOCs can employ Global Hawk (a USAF asset) by hosting this joint plug-in capability. Joint capabilities tend to be used during heightened operations and they provide the MOC with greater functionality within the joint context.

C.3.5 MOC External Collaboration

One means for the MOC to gain access to a broader group of subject matter experts is through collaboration. Any of the CFTs can reach out to experts to extend their membership to help make their planning products better. Collaboration occurs up, down, and across the chain of command, including peer organizations, as well as out to other organizations. MOCs operate within a global network that share common processes, organization structure, and C2 communication systems enabling the ability to provide mutual support. This network presents the potential for addressing emergent mission requirements by leveraging information from other similarly structured organizations.
C.3.6 Reachback

CFTs often reach back to centers of excellence to gain additional support and substantially increased capabilities to meet planning needs. Reachback effectiveness can be limited by several challenges, including a lack of formal authorities to influence supporting organizations, communications degradations, and denials. Establishing memorandums of agreement by way of the operational chain of command can mitigate the lack of formal authority.

C.3.7 MOC Mutual Support/Load Sharing

Figure C-3 shows that maritime operations centers support each other and provide additional capability, skill sets, or capacity in the form of planners or analysts through collaborative means. While all MOCs are fully engaged within their regions, therefore supporting another MOC requires mutual agreement. There are costs in terms of staff resources required for one MOC to support another MOC. These costs may at times be less than the costs to surge additional manpower to the actual MOCs.

Load sharing involves a supported MOC tasking a supporting MOC to produce planning products for them. The supported MOC retains authority and responsibility for mission accomplishment but will often be occupied with a higher priority mission. Load sharing requires the supporting MOC to make staff resources (planners, working groups, SMEs, etc.) available to join the supported MOC’s battle rhythm. One example would be a MOC handling a large-scale foreign humanitarian assistance mission while requesting another MOC to plan and monitor ongoing counterpiracy operations within their region.

C.4 MOC ORGANIZATION SCENARIOS

Each fleet headquarters maintains a baseline capability for fleet management and maritime operations that will support the operations tempo required to meet the typical phase zero daily demands of the theater, area of operations, or function. During transition to emergent operations, many MOC organizations will require greater capability and capacity to respond to the mission and increased tempo. Personnel transition plans are based on mission requirements and take into consideration employment of the various augmentation schemes, including surge support and or load sharing to deliver required capability and capacity. This section will present and discuss scenarios that illustrate how these forms of augmentation are employed along with their advantages and disadvantages.

C.4.1 Surge Support

Surge support is utilized by most MOCs. Surge support is provided by personnel that physically augment the MOC during emergent operations and is the primary means of increasing MOC capability and capacity. It involves physically sending additional personnel to the supported MOC by staffing a joint manning document through the CCDR staff to the Services to get additional personnel to bolster the MOC to support continuous operations. The surge support may be accomplished through individual augmentation, drawing manpower from the Reserve Component, warfare centers of excellence, from other MOCs, or from personnel within the command that are assigned other duties. Surge support should be included part of the organization’s personnel transition plans to support emergent operations and reflected in MOC manning documents. By-name identification of personnel from subordinate units and assigned Reserve units should be considered in the transition plans. By-name identification of potential surge personnel facilitates training to the transition plan during regular training and exercises.

Surge support was employed during the Haiti earthquake, where Commander, Fourth Fleet (C4F), in support of United States Southern Command, required additional personnel to go forward to Haiti as a MOC forward element to support humanitarian assistance operations. Active and Reserve Component Service members were resourced to support the JFMCC staff to support both maritime and air operations to move supplies into the country. These individuals were rapidly identified, located, and provided orders to travel to the MOC and then forward to the Haitian operating areas.
Many of the surge support personnel came from other MOCs and Navy commands and had to leave their normal duties to support the C4F MOC. They were not available to support their home command while in a surge status. The C4F MOC augmented their watch team with existing staff members from across the directorates while these augmentees were enroute.

Surge support provides personnel directly to a MOC to perform tasks on-site in support of heightened operations. However, this type of surge support incurs additional costs such as training, lodgment, and per diem.

**C.4.2 Reachback Support**

Maritime operation centers frequently use reachback support to obtain required capabilities and capacity. Net-centric operations facilitate this type of support. In most cases, it is prearranged for a warfare center of excellence to provide this support in the form of specific information products.

One example is the reachback support provided by Navy Air and Missile Defense Command to MOCs for BMD planning. BMD planning requires complex modeling and simulation tools as well as data link and communications experts to establish the command, control, communications, and intelligence architectures to support the mission planning and execution. NAMDC maintains planners on staff who provide planning support to the MOCs that are tailored to specific missions.

One advantage of reachback is that it provides support almost immediately. The MOC does not have to wait for an individual to make preparations and travel to a remote location. The supporting command exercises the support on a regular basis in order to stay familiar with the supported MOCs regional uniqueness and requirements. They review the supported MOC’s knowledge management portals and Collaboration at Sea Web sites to stay familiar with existing OPLANS, communications architectures, organization structure, and battle rhythm. The supported MOC’s staff gets a virtual boost in personnel to increase its capability and capacity to provide plans and orders in support of operations.

One of the disadvantages of reachback support is bandwidth constraints and potential sensor, network, and decision aid architecture denials and degradations. From the supported MOC’s perspective, reachback support may not be continuous and, therefore, not as responsive during a fast-paced crisis.

**C.4.3 Load Sharing**

MOCs use load sharing to obtain additional capabilities and capacity. To best understand the load sharing principles, it is useful to examine a scenario in which a MOC is occupied with a stressing event during heightened operations (in this scenario, a natural disaster). The MOC is occupied 24/7 trying to establish a sea base to provide logistical deliveries of humanitarian support, including medical care and supplies of food, water, and medicine. The MOC then subsequently receives an intelligence report that identifies an out-of-area deployed submarine transiting through their AOR. Since the submarine may transit through the area where the sea base is located, the commander needs to maintain situational awareness of the out-of-area deployer. To handle these and other responsibilities, the commander decides to exercise a support agreement that exists between his/her MOC and a MOC in an adjacent AOR. The supporting MOC in the adjacent AOR has a subordinate CTF that routinely tracks out-of-area deployers and is familiar with planning these evolutions. After a few phone calls, the supporting MOC agrees to convene one of its OPTs under the direction of the supported MOC to plan for the continuous tracking and reporting of the out-of-area submarine. The director of the supported MOC writes a tasking message from the supported MOC to the supporting MOC that provides planning guidance, tracking assets, and a local POC who will maintain oversight of the supporting MOC OPT’s progress.

The supporting maritime operation centers OPT intel representative tasks the supporting MOC N2 to provide intelligence preparation of the operational environment for the supported MOCs area of responsibility. Tapping into the existing IPOE from the supported MOC’s MIOC, they quickly provide the necessary intelligence products on water depth, sea lanes, and typical modes of operation for the submarine and the ocean areas it will likely transit.
The supporting MOC operational planning team prepares courses of action for the supported commander and schedules a classified video teleconference (VTC). The supported commander and planning staff receives the COA brief, selects the desired COA, and provides further planning guidance to the supporting MOC OPT. The supporting MOC OPT is directed to provide daily updates to the supported MOC’s maritime planning group so that the supported commander can remain focused on the FHA mission.

As events unfold with the out-of-area submarine, the supporting MOC OPT maintains situational awareness on the submarine through their CTF. The OPT provides updated fragmentary orders to the supported MOC future operations cell, which reviews them and then forwards to the commander for approval and release to the assigned units tracking the submarine. As part of his commander’s update brief, the supporting MOC battle watch provides an update slide and joins the VTC to answer any questions by the supported commander regarding the out-of-area submarine. This continues for a week until the submarine crosses into the supporting MOC’s area of responsibility, where they take over primary tracking and reporting responsibility and allow the original MOC to continue with the cleanup and salvage phase of the disaster relief mission.

In this scenario, it is important to note that there is not a transfer of authority from the supported commander to the supporting commander. The supported commander maintains responsibility for the mission and, therefore, continuously maintains situational awareness of both planning and operations for the out-of-area submarine.

Current MOC load sharing activities do not involve permanent manning increases at the NCC and NFC MOCs. Personnel support and required expertise are available almost immediately, and the supported MOC does not have to wait for personnel to arrive. From the supporting commander’s perspective, he/she does not lose people. They were available for part of the time to support their own staff’s needs.

Virtual collaboration used by load sharing can be impacted by interruptions to operational networks. Therefore, load sharing incurs greater operational risk than surge support. Load sharing activities impose resource demands on the supporting and supported MOCs that must be understood and accepted by both commanders.
APPENDIX D

Assured Command and Control

D.1 ASSURED COMMAND AND CONTROL

The Navy must ensure its ability to command and control forces. This requires capabilities that permit commanders to exchange orders with subordinates, target and conduct strikes as part of the joint force, and assess the results. Navy mission success—from sensing the environment to understanding our opponents to operating and defending our communications and linked systems—is inextricably linked to the assurance of command and control.¹

Today’s sensor, network, and decision aid architectures are key elements of a dynamic command and control environment. Commanders must be positioned to maintain responsive command and control over multiple plans being executed concurrently across three planning horizons, while assimilating knowledge of what the enemy is doing at all times—being quick to countermove on receipt of reliable information.² Consequently, proactive command and control of systems and architectures is a necessity if commanders are to assure command and control and exert exacting control over assigned and attached forces to guide operations and win the day.

The terms “assured C2” and “command and control of C2 (C2 of C2)” are increasingly used interchangeably. C2 of C2 is the philosophy, systems, and processes used to ensure a commander’s command of forces and exacting control of operations. Command and control is enabled by three architectures: intelligence and information sensors, data, and analysis; networks and communication transport; and decision support. The combination of these three architectures makes up the C2 apparatus.³ Assured C2 and associated C2 of C2 processes, procedures, and protection are applied to these architectures to ensure they optimally support the commander’s intent, priorities, and scheme of maneuver.

Assured C2, and successful command and control of C2 systems and architectures, requires proactive, deliberate, and persistent coordination and collaboration across all MOC directorates. This includes close coordination across the command’s directorates to identify operational and technical impacts, conduct intelligence and information operations assessments, and implement mitigation strategies. This leads to greater alignment and synchronization of C2 architectures to the joint force commander’s intent, priorities, and scheme of maneuver.

Assured C2 and associated processes and systems provide commanders a clear and timely understanding of how degradations to any part of the C2 apparatus impact the ability to execute maritime operations. This includes synchronized mitigation strategies that are implemented across the force⁴ so that maritime and joint commanders are assured the capability to command and control forces when access to critical information, systems, and services are reduced or prevented.⁵

Assured C2 does not redefine command and control. The tenets of command and control are timeless and well documented as a joint function. Assured C2 and associated C2 of C2 systems, processes, and architectures have been rapidly implemented by key MOC CFTs over the past three years. Assured C2 will continue to evolve as cyberspace operations command and control TTP mature.

³ The C2 apparatus includes: 1) intelligence and information sensors, data, and analysis, 2) networks and transports, and 3) decision aids, architectures, and supporting systems. C2 of C2 is a partnership of traditionally segregated staff directorates with a primary focus across N2/N3/N39/N6 identification of operational impacts, technical impacts, and intelligence and Information operations assessments.
⁴ TM 3-32.3-12.
⁵ TM 3-56.1-12.
Several documents provide useful operational level of warfare context for assured command and control. Detailed CFT constructs and processes can be found in the classified TM 3-32.3-12, and describe means by which MOCs can manage or influence multiple external entities that exercise operational control of the C2 apparatus and, thereby, assure command and control of maritime forces. The unclassified FOUO white paper Enabling Cyberspace Operations in Support of C2 of C2,\(^6\) provides a detailed discussion of operational network domains. These domains leverage agile secure enclaves to manage risk and establish information sharing enclaves that support multiple security classifications, releasability caveats, and information handling instructions, that are responsive to the joint force commander’s intent, phasing, and scheme of maneuver.

**D.2 THE C2 APPARATUS**

Figure D-1 is an extract from TM 3-32.3-12 that depicts the C2 of C2 construct. This construct surrounds the C2 apparatus with processes, procedures, and protection. Assured C2 processes and systems align the three architectures of the C2 apparatus to support the commander’s intent and guidance, and assure C2 of maritime forces. During execution, assured C2 processes assist MOC CFTs to effectively monitor the C2 apparatus, rapidly detect and identify degradations, and determine the technical and operational impacts these degradations have on the commander’s ongoing and planned operations. The MOC six-element network operations common operational picture (NETOPS COP) report is one example of a C2 of C2 TTP that significantly enhances assured command and control by fusing multiple MOC N2/3/39/6 CFT efforts. The six-element report is a simple and powerful way for MOC CFT stakeholders to deliberately manage C2 apparatus information and information flow to rapidly identify the operational impacts and manage or influence mitigation strategies to command and control C2 systems and architectures that impact maritime operations and assure C2. The six-element report can be

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integrated into a Communications Information System Center/Navy Communication System Coordination Center NETOPS COP or simply coordinated through e-mail between CFT stakeholders. TM 3-32.3-12 depicts classified examples of this fusion process and details MOC CFT input and output touch points between CISC/NCCC, MIOC, FCC, COPS, FOPS, FUPLANS, and IO stakeholders.

The six elements of this report are: event, status, operational impact, time, reason for outage, and intel assessment/IO impact. A significant amount of N2/39/6 fusion occurs when generating the six-element report, including: an N2/N39 intel IO assessment, N3 operational impact assessment, and N6 technical impact assessment. Data is kept simple, yet not eliminated, in order to support the operational assessment. At its core, the MOC six-element NETOPS COP report is written by the CISC/NCCC watch officer for the operational community focused on why a NETOPS COP event is important versus the technical reason for the degradation or denial/how it is being fixed. Emphasis is placed on how the NETOPS event is affecting operations across all three planning horizons (COPS, FOPS, and FUPLANS). Use of the NETOPS COP six-element format facilitates interactions between the CISC/NCCC watch officer who enters the event into the NETOPS COP; the MIOC intel watch officer who coordinates an intel/IO assessment regarding malicious activity/how outage or degradation is impacting intel-related tasking/operations, and the battle watch captain/current OPS officer (and future OPS officer/future plans officer as required). CISC/NCCC watch officer cross-referencing of battle watch updates and MOC director end-of-days and interface with internal N3 SMEs across the internal staff and external Fleet Cyber Command, NNWC, naval computer and telecommunications area master station, and naval computer and telecommunications station watch officers is assumed.

D.3 MARITIME OPERATIONS IN A COMMAND AND CONTROL DENIED OR DEGRADED ENVIRONMENT

Future warfare capabilities will focus on better controlling the electromagnetic spectrum, extending the Navy’s defensive and offensive capabilities in the cyberspace domain, and maintain the speed, agility, and adaptability of our decision-making C2 abilities during operations in a communication-degraded or -denied environment. Such environments are increasingly referred to as a command and control denied or degraded environment (C2D2E). The requirement for assured C2, and associated processes and systems, stems from a diverse range of threats comprised of many actors exploiting numerous vulnerabilities and potentially creating significant operational impacts. Threat actors include nonstate and state actors. Nonstate actors include hackers, organized criminal enterprises, and terrorists. State actors run the gamut from rogue nations to near peers. Own actions are also a threat, including deliberate nefarious actions such as the WikiLeaks theft, inadvertent or accidental actions, and equipment failures. Natural events, such as storms, seismic events and solar activity, may also drastically impact the C2 apparatus.

Threats generally fall into two broad categories: kinetic and nonkinetic attacks. Kinetic attacks include physical attacks on the C2 systems and infrastructure such as attacks on sensors and communication systems transport including military and commercial infrastructure. Near-peer competitors may also have the capability to physically attack space-based sensors, Global Position Systems (GPS) and communication transport satellites. Typical nonkinetic means include jamming RF signals, sensors, position, and navigation and timing (GPS) systems.

D.3.1 Assured C2/Command and Control of Command and Control Cycle

Maritime commanders must maintain the capability to command and control forces during operations. Maritime forces need to continue operations during periods of denied or degraded communications while mitigating impacts and restoring affected systems, applications, networks, or transport. Commanders and staffs must pass plans and orders and understand the status of ongoing operations and the readiness of forces conducting the operations or required for standing OPLANs and CONPLANs. Commanders and staffs must readily understand all aspects of the C2 apparatus so that they can alter operations and plans as necessary to accommodate degradations and impacts during DIL events.

The assured C2/C2 of C2 process is a key enabler of information dominance for maritime operations. These processes provide a systematic approach to monitor, manage, and optimize the C2 apparatus during outages and intrusions. The following activities (known as the assured C2/C2 of C2 cycle) are necessary to fulfill this requirement:

1. Align C2 apparatus to support commander’s intent and priorities
2. Monitor C2 apparatus health and defense status
3. Detect and report outages and intrusions
4. Determine and report impacts on operations and plans
5. Rapidly reallocate architecture
6. Determine cause and localize
7. Mitigate/counter outage or intrusion, and restore capability.

Each step involves multiple and simultaneous activities. The cycle supports the maritime commander’s decision cycle. The PDMA cycle and the assured C2/C2 of C2 cycle turn at different speeds with on and off ramps for sharing information and products. Although each commander has specific preferences for staff support, it is imperative that assured C2 activities support the commander and align and synchronize with the embedded MOC activities. Figure D-2 is a pictorial of the assured C2/C2 of C2 cycle.

An assured C2 capability must be developed up front during planning. Assured C2 planning includes the alignment of the C2 apparatus that supports an operation and the development of plans CASOPs and PPRs to mitigate potential threats to C2. All phases of an operation or campaign across the range of military operations require assured C2/C2 of C2 planning.

Figure D-2. Assured C2 of C2 Cycle
D.3.2 Command and Control in a Denied or Degraded Environment's Five Elements

Command and control in denied or degraded environment guidance is provided as a set of five framework elements (see figure D-3).\(^8\)

In anticipation of the likelihood that future operations will take place in a denied or degraded environment, the following five-element construct is a helpful way to anticipate and counter the adversary’s attack on the maritime force’s C2 capability:

1. **C2D2E Execution Process**: A deliberate and integrated process to synchronize activities and ensure the C2 apparatus remains optimally aligned to support mission requirements.

2. **Planning Requirements for C2D2E**: Consideration of C2 threats and capabilities during the deliberate planning process to enable development of appropriate COAs, CASOPS, and PPRs to support mission execution in C2D2E.

3. **Defining the C2 Apparatus**: Defining and understanding the entirety of the C2 apparatus and an adversary’s capability to influence it as a foundation to support C2 planning and execution.

4. **Development and Maintenance of Full Spectrum C2 Capabilities**: Provision and maintenance of a diverse range of C2 capabilities to support planning and execution of operations against a capable and diverse C2 threat.

5. **Mission Command**: The leadership philosophy that complements the Navy’s warfighting philosophy and sustains warrior ethos.

The five elements provide maritime commanders the means to prevail against anticipated and unanticipated attempts by the adversary to deny or degrade maritime command and control.

Additional information on this topic can be found in the C2 of C2 and C2D2E TMs 3-56.1-12 and 3-32.3-12.

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\(^8\) TM 3-56.1-12.
APPENDIX E

Maritime Deliberate Targeting

E.1 INTRODUCTION

Targeting is the process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities. (JP 3-0)

Navy and joint doctrine delineates a six-phase targeting cycle that supports all of the planning horizons of the joint operation planning process ensuring that the targeting process adaptively supports achievement of the commander’s objectives as opportunities arise and plans change.

Through the six-phase maritime targeting cycle, maritime forces support maritime objectives and warfare commander operations. The JFMCC and warfare commanders select and prioritize targets based on operational and tactical objectives and match the appropriate maritime capabilities to them. Maritime targeting translates the desired effects of fires to tactical force actions.

When the JFC designates a maritime AO, the JFMCC is generally the supported commander within the AO. As supported commander, the JFMCC integrates and synchronizes maneuver, fires, and interdiction. To facilitate this integration and synchronization, JFMCC has the authority to designate target priority, effects, and timing of fires within the area of operations.1 Maritime targets in the maritime AO, ashore and afloat, will be engaged by organic maritime forces supported by joint forces as necessary.

E.1.1 Maritime Targeting Environment

The maritime environment is multidimensional; therefore, the nature of maritime warfare is multidimensional and requires the coordinated efforts of the various tactical warfare commanders to accomplish maritime missions. Likewise, maritime targeting involves integrating contributions from tactical and operational commands. Each warfare commander generates specific targeting requirements, each competing for maritime resources. The MOC may also generate maritime targeting requirements that are not apparent to tactical commanders.

Multimission capability of Navy ships and aircraft creates competition for asset assignment. Mission prioritization and synchronization allows the CTFs, the CWC, and warfare commanders to properly balance asset allocation to the various maritime targeting domains.

The JFMCC designates target priority, effects, and timing of fires within the maritime AO. The maritime AO may encompass the littoral area or land areas; however, the commander must have the capability to coordinate, synchronize, and deconflict fires and targeting within the entire area of operations.

E.1.2 Maritime Targets

Most maritime targets at sea are by nature dynamic. Contact with enemy aircraft, ships, and submarines generally involves a moving adversary. However, maritime targets may include cyber targets or land targets in the maritime AO or in areas assigned to other component commanders. Examples include inland or littoral targets such as enemy naval operations centers, coastal defense cruise missiles, ballistic missile infrastructure, mine storage facilities, ships and submarines pier side, or amphibious assembly areas.

1 JP 3-0.
E.1.3 Distributed Targeting

The distributed nature of maritime forces makes a distributed targeting process a necessity. The MOC must be linked to subordinate tactical commanders as well as to the JFC and other components involved in targeting. Joint targeting toolbox (JTT) is a Web-based application and can be used to access the target database, build target folders, and build target lists used during the targeting process. The JTT provides system interoperability and standardized information dissemination necessary for distributed targeting. JADOCS has the same capability to build and distribute deliberate target lists. The maritime commander must ensure that forces are equipped with the appropriate tools to integrate with other theater commands. Web-based collaboration tools (e.g., Defense Connect Online, CITRIX Systems, Voice over Internet Protocol, etc.) provide distributed participation in targeting efforts across the joint force as well as the maritime force. Liaison officers (e.g., naval and amphibious liaison element at the air operations center) provide indispensable interface with other organizations. However, direct interface by MOC personnel in the targeting process through the use of collaborative tools provides for greater visibility into joint targeting for the MOC and the maritime commanders. NALE efforts should be focused in the strategy directorate and target effects team for operational objective development and target advocacy to provide the greatest value to the maritime commander.

E.1.4 Federated Targeting

Targeting benefits from, and in some instances may require, reachback to other commands and centers of excellence. These include Navy, joint, and national intelligence capabilities (e.g., Navy information operation commands, regional fleet information operations centers, geographic combatant commander joint intelligence center, Defense Intelligence Agency, Joint Warfare Analysis Center, and National Geospatial-Intelligence Agency). This reachback can provide the completeness and fidelity to target development. The MIOC and IO cell targeting personnel will maintain the connectivity to the JFC and external centers for federated targeting support to the MOC. Federated targeting support includes:

1. Target material production
2. Target system analysis
3. Aimpoint mensuration
4. Collateral damage and weaponeering estimate development
5. Combat assessment.

E.1.5 Integration with the Joint Targeting Process

Collaboration between joint force staff targeting specialists and component-level operations and targeting planners is a critical element of the execution of the joint targeting cycle at all levels (JP 3-60).

The interface of maritime targeting with the joint targeting cycle is an important part of integrating maritime operations into joint operations. Integration into the joint targeting cycle provides for targeting coordination, deconfliction, prioritization, integration, synchronization, assessment, and support with other components. Through integration in the joint targeting process, the maritime component nominates for servicing by other joint forces targets that impact maritime objectives but are outside of the maritime commander’s AO or targets that are inside the maritime AO but exceed the capabilities of organic or supporting assets. It also provides a venue for coordination of excess maritime assets made available for joint tasking.

The maritime force provides representation at the various joint and other component boards, cells, working groups, and teams that manage the joint targeting cycle (e.g., the joint targeting working group (JTWG), the joint collection management board (JCMB), the joint targeting coordination board and the JFACC target effects team). The commander is represented by the MOC FE representatives by way of networked meeting tools (e.g., VTC, Defense Connect Online, TANDBERG) and by liaison officers. The MOC’s battle rhythm synchronizes maritime
targeting with joint targeting. Maritime targeting organizations interface with other joint and component targeting organizations through battle rhythm events and produce the products that input into the joint targeting process. The coordination of target prosecution with other components and the JFC contributes to ensuring unity of effort within the joint force.

E.2 THE MARITIME TARGETING CYCLE

Deliberate targeting is achieved through application of the joint targeting cycle. The maritime targeting cycle mirrors the joint targeting cycle’s six phases. The first two phases are conducted during planning well before execution begins and then aspects of the first two phases are conducted with the remaining phases on a daily basis during execution. The MOC fires personnel coordinate the development of the maritime commander’s targeting guidance, intentions, and risk tolerance; compile and prioritize maritime target lists; forward maritime target nominations; synchronize maritime force maneuver, when necessary; coordinate with other components and HHQ; and monitor execution. Figure E-1 depicts the maritime targeting cycle.

![The Maritime Targeting Cycle Diagram](image)

Figure E-1. The Maritime Targeting Cycle
E.2.1 Phase 1—Develop Maritime Commander’s End State and Objectives

Joint targeting is a tailored application of the basic estimate process that supports joint operation planning and execution (JP 3-60).

1. During Planning: The product from phase 1 of the targeting cycle—the commander’s objectives and end state—is initially developed and refined by the MPG during operation planning and helps frame targeting. The military end state is the set of required conditions that defines achievement of all military objectives for the operation and provides the initial impetus for the targeting process. Understanding the commander’s guidance is the first activity of joint and maritime targeting because it encapsulates all the requirements and outcomes relevant to the operation and sets the course for conduct of the operation. The initial maritime targeting strategy that supports mission priorities is developed during COA development and refined during COA wargaming.

From the maritime operational objectives (OOs), the MOC will develop operational effects for each operational objective. Operational effects link operational objectives to tactical tasks by identifying desired and undesired effects. Effects are also used as a means to continually measure and assess operational effectiveness.

Objectives and tasks are typically stated in terms of friendly goals and actions, while effects are stated in the form of behavior and capabilities of the adversary system within the operating environment. An example of a maritime objective might be that sea lines of communication in the joint operations area remain open. Two of the conditions or effects identified by planners required to achieve the objective might be that the enemy ships remain in port and that neighboring countries resist insurgent use of ports as a base of operations. The maritime commander includes the desired effects as part of commander’s intent. The tasks assigned to subordinate tactical commanders are better understood when associated to desired effects. Subordinate tactical warfare commanders develop tactical objectives (TOs) and tactical tasks (TTs) which then drive target selection to achieve the tactical tasks.

The targeting strategy is the basis for initial target set selection and target development by MIOC and IO targeting personnel. Targets necessary for maritime forces to accomplish tasking are submitted to the JFC through target development nominations that ultimately build the HHQ’s joint target list for an operation.

2. During Execution: During execution, phase 1 starts with a review of measures of effectiveness and indicators (e.g., MOEs and MOE-Is) to assess whether the effects and objectives are being or have been attained. This assessment of objectives ultimately influences targeting.

Prioritization of operational objectives can change during an operation due to adversary action or the incorporation of a branch plan in the maritime scheme of maneuver. Targeting must accommodate changes in operational priorities. The COPS cell coordinates changes to prioritization of operational objectives through daily review of the operational situation, inputs from tactical commanders, operational assessment by the MAG, branch planning by the FOPS cell, and commander’s intent.

Daily prioritized maritime OOs, TOs, and TTs provide two inputs into the targeting process. First, prioritized maritime OOs, TOs, and TTs guide development of daily maritime targeting guidance which focuses development of the daily target lists and ultimately dictates targeting support for maritime operations. Targeting guidance is reviewed daily at the maritime targeting working group and the maritime targeting coordination board. Second, prioritized OOs, TOs, and TTs are used as the JFMCC’s daily input into the JFACC air and space operations directive. The AOD provides the basis for the joint integrated prioritized target list. The JFMCC’s input into the AOD is the venue to ensure that joint targeting supports maritime objectives and scheme of maneuver. The maritime targeting guidance must look out 96 hours to meet the AOD development schedule.

Face-to-face involvement in AOD development is one of the key responsibilities of the NALE. The JFMCC’s input into the AOD development should be submitted 72–80 hours (3 1/2 days) prior to the execution day. Joint targeting toolbox is used to develop and record the AOD targeting strategy. JTT can provide the MOC visibility
and facilitate involvement in AOD development. The MOC provides apportionment recommendations when submitting the AOD input.

Concurrent with prioritizing operational objectives, the maritime commanders must consider the scheme of maneuver 96 hours out. This informs the maritime commander’s apportionment recommendation for joint targeting. As with developing a targeting guidance, development of the scheme of maneuver is a collaborative effort between the JFMCC and the subordinate commanders. Periodic commander’s VTC, the MTWG, and the MTCB provide the venues for working these issues.

Daily joint apportionment guidance is provided by the JFC normally during the joint coordination board, sometimes called the joint integration board. If not previously resolved, the maritime commander will provide TLAM apportionment recommendations including TLAM apportionment for TSTs and component critical targets. The JFC apportionment for joint targeting is a weighting of effort used by the JFACC for the various joint targeting requirements. It does not determine the JFMCC’s distribution of organic and joint sorties. Joint missions are excess sorties not needed by the maritime force to conduct maritime operations that are made available for joint tasking by other components. Typically, joint air missions are tasked by the JFACC through the air tasking order. Organic maritime air missions, while not tasked by the ATO, should be included on the ATO to provide visibility to the joint force.

**E.2.2 Phase 2—Target Development and Prioritization**

1. **During Planning:** Phase 2 of the targeting cycle entails the systematic examination of potential target systems (their components, individual targets, and target elements) to determine the necessary type and duration of action that must be exerted on each target to create the required effect(s) to achieve the operational objectives. After potential target systems are matched against the commander’s objectives, target system analysis identifies critical components or nodes of a target system, which are generally used as a baseline for target selection. Target system analysis is conducted by the subordinate warfare commanders and CTFs for their assigned missions and by the MIOC targeting branch, IO cell, and fires targeting team.

   a. **Target Development.** Led by the numbered fleets, maritime forces, including USMC expeditionary forces, select maritime and amphibious targets that support operational and tactical objectives. Targeting officers/targeteers—both at the MOC and assigned to tactical commands—research targets and target nodes that create desired effects for maritime missions. Within the MOC, this effort is primarily conducted within MIOC targeting and the IO cell.

This target development effort builds the operation’s joint target list. The JTL is the primary target database for an operation from which daily targets are selected. While JTL development may continue during an operation, it is primarily built and developed well prior to the start of a campaign or operation. Targeting officers start building an operation’s JTL during planning by searching for targets in databases (e.g., the MIDB) and portals through automated searches. The MIDB is the DOD’s authoritative, all-source repository of worldwide general military and targeting intelligence.

The MPG will be assigned targeting representatives to support target strategy and target set development. Future operations OPTs will also be assigned targeting representatives to support target set development during FOPS branch planning, if necessary.

Target development always approaches adversary capabilities from a systems perspective. While a single target may be significant because of its own characteristics, the target’s real importance lies in its relationship to other targets within an operational system. A target system is most often considered as a collection of assets directed to perform a specific function or series of functions (see figure 3-4). While target systems are intradependent to perform a specific function, they are also interdependent in support of adversary capabilities (e.g., the electric power system may provide energy to run the adversary’s railroads that are a key component of their military logistic system). Target development links these multiple target systems and their elements (targets) to reflect both their intra- and interdependency that, in aggregate, contribute to the adversary capabilities.
Weaponeering for each target is completed to the greatest extent possible during JTL development and should include many different weaponeering options considering all potential weapons and a variety of aimpoint solutions. Collateral damage estimation should also be conducted for each weaponeering solution. The SJA will conduct a legal review in conjunction with CDE, reviewing targets for LOAC and ROE/RUF considerations.

These targets are consolidated and deconflicted by the FE in collaboration with subordinate commands and then submitted to the JFC by way of target development nominations. TDNs subsequently drive further target development and consolidation with all component TDNs into a candidate target list for vetting, validation, and generation of the JFC’s JTL, RTL, and possible additions to the NSL if LOAC issues emerge.

b. Target Vetting and Validation. Target vetting leverages the expertise of the national intelligence community to verify the accuracy and fidelity of the intelligence and analysis used to develop the target—whether a target is a viable element of the target system. During target validation, the potential benefit of striking a target is weighed against the potential costs. The first part of validation asks such questions as:

(1) Does the target meet component commander or JFC objectives, guidance, intent, and strategic communication goals?

(2) Is the target consistent with LOAC and ROE/RUF?

(3) Is the desired effect on the target consistent with the end state?

(4) Is the target politically or culturally sensitive?

(5) What will the effect of striking it be on public opinion (enemy, friendly, and neutral)?

(6) What are the risks and likely consequences of collateral damage?

(7) Is it feasible to attack this target? What is the risk?

(8) Is it feasible to attack the target at this time?

(9) What are the consequences of not attacking the target?

(10) Will attacking the target negatively affect friendly operations due to current or planned friendly exploitation of the target?

(11) What are the potential intelligence gains/losses?
The second part of validation starts the coordination, integration, and deconfliction of actions against the target with other operations. This continues during an operation after responsibility for execution monitoring is assumed by the COPS. Once potential targets are identified, vetted, and validated, they become part of the JFC’s joint target list. The pre-campaign target development is necessary to have adequate time for thorough target development. A meeting of a target intelligence planning committee (TIPC) or similar type meeting may be held periodically (e.g., monthly) by the CCDR through JWICS VTC to review target vetting and validation.

2. During Execution: As the transition to crisis occurs, identification of potential target sets and target nominations to the JTL may continue. If a target development effort for an operation has not been previously established, the MIOC will coordinate with the JFC J–2 to establish and identify federated partners and processes. Normally, the CCDR J–2 will oversee the process of integrating National level expertise and resources. During an operation, the TIPC (or similar type meeting) would generally be held daily.

During an operation, changes in the operational environment may cause changes to commander’s guidance and intent. Target development continues to evolve and accommodate changes during execution with the principle difference being the decreased amount of time available to develop target information.

During ongoing operations when time is critical, target vetting is conducted by MIOC targeting. Validation during execution includes analysis of the situation to determine if planned targets still contribute to objectives (including changes to plans and objectives), if targets are accurately located, and how planned actions will impact on other friendly operations. This function is performed by COPS and warfare commander watch standers and includes current intelligence support.

a. Target Selection and Prioritization. The JTL provides the baseline target database for daily component and joint targeting. The MOC and subordinate tactical command targeting teams select targets based on direct, indirect, cumulative, and cascading effects that would impact or influence their operations. All
target nominations must be down to the joint desired point of impact (not just basic encyclopedia number) to clarify the exact node targeted and the effect trying to be achieved. Targets are prioritized, typically by intelligence targeting personnel within each tactical command and the MOC and should support the operational scheme of maneuver. A formal relationship between MOC intelligence targeting and the MOC IO cell must be identified (i.e., a specified MIOC targeting officer for liaison with the IO cell) for synchronization of lethal and nonlethal fires.

There must be continuous communication between COPS fires/MDT watches, the TLAM cell, COPS intel, and the MOC FE targeting team personnel to stay current on targeting mission results that affect follow-on targeting. All submitted prioritized daily target requirements are compiled by the MOC FE targeting team and reviewed by the MTWG. Commander’s guidance and intent and operational objectives guide target prioritization. The prioritized target list is approved at the MTCB, normally chaired by the deputy maritime commander.

The MTWG and MTCB are collaborative groups which include MOC FE personnel and subordinate maritime command targeting officers or representatives. The MTWG and MTCB are held daily through classified VTC or networked collaboration tools. They must be timed in the JFMCC battle rhythm to allow for targeting input into the joint targeting cycle.

Targets that are outside the JFMCC’s AO or cannot be prosecuted by maritime forces due to asset limitations are forwarded daily to the JFC’s joint fires element as the maritime target nomination list. Time-sensitive targets and high-payoff target recommendations are also nominated to the JFC. Time-sensitive targets nominations that are not included in the JFC’s TST list are included in the JFMCC’s maritime dynamic target list.

Targets within the maritime AO that will be prosecuted by maritime forces from the maritime prioritized target list (MPTL). IO capabilities will be considered in developing the MTNL and MPTL. The SJA will be involved in development of the MTNL and the MPTL for legal review of law of war, ROE/RUF, and even political considerations. Development of TST and MDT inputs should include legal consideration to prevent mistakes from being made or mitigate their impact during demanding dynamic targeting challenges.

Networked collaboration tools (e.g., Adobe Connect) or classified VTC provide the means for distributed target development within the maritime force. The JTT provides access to the MIDB and JTL and is used to build daily target nomination lists and pass the MTNL to the JFC. JADOCS can also provide this function. The MTNL is submitted 48–54 hours prior to the beginning of the ATO execution day. The MPTL is developed with the MTNL; however, MPTL missions (targets within the maritime AO) can possibly be executed earlier than the MTNL targets developed on the same day.

Component target nomination lists (e.g., the MTNL) are combined, integrated, and prioritized to form a draft JIPTL. Joint force commander objectives defined in the JFACC AOD guide prioritization. The draft JIPTL cut line reflects which targets will most likely be attacked (barring retasking for higher priority targets or other operational circumstances) with the projected apportionment of air assets assigned or made available to the JFACC. To establish relative priority, the JIPTL may also include targets that are currently unlocated but once they are located they may be engaged.

Joint target prioritization is reviewed by the joint targeting working group, sometimes called the joint effects working group, with representatives from each component. The JTWG and the joint collection working group are action officer working groups established to resolve issues prior to presenting plans to commanders for decision. The MOC’s FE will participate in the JTWG through networked collaboration tools. The JFMCC may also be represented in the JTWG by officers with appropriate rank, experience, and knowledge from the NALE. The draft JIPTL will be submitted to the joint targeting coordination board for approval.

b. Collection Management. A linkage between targeting and collection management (CM) is vital to successful targeting and combat assessment. The MOC and tactical forces must coordinate collection requirements to support target development. Within the MOC, ISR is a combined intelligence (collection management branch) and operations (COPS ISR operations) effort. Collection coordination is finalized during the MTWG and subsequent MTCB. The MTWG and the maritime collection
working group (MCWG) provide for alignment of CM with targeting so the maritime collection plan supports targeting requirements. Collection requirements that cannot be satisfied with maritime forces are submitted for consideration by joint collection management.

**E.2.3 Phases 3 and 4—Capabilities Analysis and Commander’s Decision and Force Assignment**

The functions of these two phases are to determine engagement options, evaluate specific capabilities against identified target vulnerabilities, estimate effects, conduct weaponeering, consider risk to forces, determine asset availability, and conduct asset-target pairing.

The capability analysis phase of the targeting cycle involves evaluating available capabilities against desired targets and effects to determine the appropriate options. Risks to the force and collateral concerns are also considered in evaluating available capabilities. Tactical forces, the IO cell, and the TLAM cell develop the various lethal and nonlethal targeting options.

Once appropriate options are developed, analysis focuses on target details and evaluating the specific capability options against identified target vulnerabilities to estimate effects. Maintaining the thread from the maritime objectives and guidance to tactical objectives and effects is integral to this analysis. Nonlethal capabilities are considered as part of this analysis. Effects estimates should take into account estimated enemy repair and recuperation times when matching capabilities with vulnerabilities. Reuse and reconstruction during later plan phases should also be accounted for to avoid negatively affecting the end state. Weaponeering includes aimpoint mensuration, determining the effect (i.e., probability of damage), collateral damage estimation, and refining aimpoints. This process builds on the analysis performed during target development. Targeting personnel at both the MOC (targeting branch, TLAM cell, IO cell) and at tactical commands conduct capabilities analysis. These estimates of performance are not designed to address whether or not the delivery system will survive to reach the target.

Once the capabilities analysis phase is complete, the individual target nominations can be matched with appropriate weapons or other capabilities to create the desired effects on the target(s) on the MPTL. This is a collaborative effort between tactical commands, principally air wing representatives, and the fires element. When assets from other tactical commands are involved, representatives from those commands will be involved in weapon-target pairing discussions. Among the factors to be considered in the MTWG targeting recommendation are asset requirements for mission execution by warfare commanders, risk to aircrew, and TLAM inventories. The MTWG leverages the expertise of subordinate commands. This coordination will ensure weapon-target pairing between TLAM and TACAIR is appropriate, and TLAM and TACAIR missions are synchronized and integrated to ensure efficiency and to prevent fratricide when involved in the same mission. The MTWG arbitrates targeting engagement options, asset-target pairing recommendations, and allocation recommendations from the CWC/CTFs.

Collateral damage estimation is conducted for each target. Personnel conducting CDE must be certified to theater standards defined by the CCDR. JFC guidance will define CDE approval authority. Collateral damage estimation begins with the target development planning phase and continues during execution. CJCSI 3160.01, No strike and Collateral Damage Methodology, details a specific CDE process followed DOD-wide. JADOCs CDE application is approved for formal CDE in some theaters. Targets with associated collateral damage concerns expected to exceed theater (combatant command) thresholds are referred either to the Secretary of Defense or President using the sensitive target approval and review process, detailed in CJCSI 3122.06B, Sensitive Target Approval and Review (STAR) Process.

As with JTL development, the SJA will conduct a legal review in conjunction with CDE, reviewing targets for LOAC, ROE/RUF considerations, and other restrictions.

Once organic maritime air requirements are determined, excess maritime air sorties are made available for tasking by other joint force component commanders, typically the JFACC. In a maritime-intensive operation or with the maritime commander as the supported commander, it is quite likely there will be no excess sorties available. The
AOC is informed of any excess maritime air sorties via an air allocation request message. Since the CWC/CTFs and the warfare commanders have the greatest visibility into mission requirements, the CWC/CTF or designated warfare commander will publish the ALLOREQ, informing the JFMCC of their input. The ALLOREQ should be provided 24–36 hours before the ATO execution day.

The MOC will publish maritime targeting decisions. Specific daily unit tasking, including strike mission tasking, is a responsibility of the CWC/CTFs. These are typically done through DIMs and the air plan. Specific TLAM tasking is done within the MOC. All organic aircraft missions and TLAM missions should be inputted into the JFACC ATO for visibility across the joint force.

For joint targets, which include those on the MTNL, the AOC target effects team leads targeting capabilities analysis and the master air attack plan team matches weapon systems to targets. The MAAP team takes the final prioritized list of weaponeered joint targets and allocates airpower by melding available capabilities and resources with the TET’s weaponeering recommendations. The NALE or MOC joint targeting representatives (using networked collaborative tools) will monitor each part of these efforts to provide expertise on maritime assets. The JIPTL cut line does not guarantee a target will be tasked in that day’s targeting cycle. MOC joint targeting representatives or the NALE should be ready to justify and/or prioritize target nominations among all the priorities of the operation. Maritime representatives to the MAAP team should include expertise for each type of maritime asset provided for joint tasking. These representatives may be provided by the carrier air wing and other tactical forces. NALE first priorities are with JFACC AOD targeting strategy development and target prioritization.

Once the JFC has approved the JIPTL and targets have been matched to appropriate assets, the ATO is approved by the JFACC and released to the executing components. Maritime forces provide the JFACC with an ATO shell for organic maritime missions: the TLAM cell provides TLAM missions input, carrier air wing and carrier strike operations personnel provide CSG TACAIR mission information, and ESG TACC will provide amphibious force mission information through individual ATO shells. To provide visibility across the joint force, JFMCC organic missions will be inputted into the air tasking order. The MAAP toolkit is a network-centric application used to input missions into TBMCS.

**E.2.4 Phase 5—Mission Planning and Force Execution**

Even before receipt of the air plan and ATO, maritime tactical strike planners conduct detailed mission planning for maritime and joint missions. The work of strike mission planners is significantly enhanced when they are furnished with detailed insights into the reasoning that resulted in the air plan and ATO tasking. Because the pairing of capabilities against joint targets are made using nominal weapon and weapon system performance data, there may be divergences with the more current and/or specific data used by tactical-level planners. Making the factors used in force planning available to the tactical planners, and providing real-time collaboration with force targeting officers enables adjustment and fine-tuning of target planning. It also provides a channel to discuss mitigation of risk for the attacking force, since variations in tactics may be required that could affect the mission results. This is a critical path of information flow that reduces the likelihood of confusion between what was expected at the joint force level and what was actually achieved during execution. A direct liaison authorized relationship is generally established between the carrier air wing, USMC air wing, and the JFACC AOC combat plans and combat operations divisions to handle these issues. A similar relationship between TLAM planners in the MOC and the JFACC AOC should also be established.

The CWC/CTFs tasking orders, the air plan, and DIMs reflect decisions from the MTCB and JTCB. By the time the air plan is published, much of the detailed planning will already have been accomplished. In fact, tactical Navy mission planners, both TLAM and TACAIR, provide major input into capabilities analysis and also provide input on the availability of assets and the feasibility of executing specific targeting missions. Navy and Marine Corps strike mission planning is conducted by the aircrews that will execute the mission. This strike mission planning responsibility includes weaponeering decisions and, to some extent, decisions on how best to achieve the desired effect.
E.2.5 Phase 6—Assessment

Targeting assessment is the determination of the effectiveness of lethal and nonlethal targeting missions. During the assessment phase, the results of the engagement are collected to determine whether the desired results were achieved. Immediate tactical assessment feeds dynamic re-attack decisions by tactical commanders or COPS.

Tactical targeting assessment feeds both operational assessment and operational and tactical planning. Targeting assessment requires collaboration between tactical commands and MOC personnel. Tactical commanders receive mission feedback mission reports that provide the initial input for CA. They also use this immediate assessment feedback for retargeting decisions. MOC targeting personnel have better access to joint collection management for use in targeting assessment and use tactical assessment feedback for maritime targeting decisions and as an input into operational assessment.

Targeting assessment focuses on accomplishment of target engagements. Assessment is common to both deliberate and dynamic targeting and must be integrated to provide the overall targeting assessment. The results of target engagements are often physical in nature but also can reflect the impact on specific functions and systems. Assessment may include assessing larger goals than just an individual target: destruction of enemy forces; control of key terrain, people, or resources; and security or reconstruction tasks. Targeting assessment will help the commander determine operational progress and will feed joint assessment.

1. Combat Assessment. Combat assessment is comprised of battle damage assessment, munitions effect assessments, and re-strike recommendations. A Phase I BDA report (BDAREP) is used to provide an initial physical damage assessment of hit or miss based on single-source data. A carrier air wing can provide a Phase I BDAREP from confirmation of the pilot’s MISREP/bomb hit assessment or weapon system video. The reports state whether a target was hit or missed and include an initial estimate of damage. TLAM requires an additional asset support for Phase I BDA and could be accomplished by units having the capacity to download and analyze imagery. Phase II BDA uses all source intelligence and contains detailed physical and functional damage assessments, inputs to the target system assessment, comments on munitions effectiveness, and recuperation time. Phase II BDA is usually federated among the MOC, carriers, and large-deck amphibious ships; no single organization can do all BDA. Phase III BDA (target system assessment) is beyond the capability of forward-deployed naval forces.

Combat assessment in the MOC is conducted primarily within the MIOC combat assessment branch/BDA cell and is at least a two-person, 24/7 effort. Battle damage assessment is tracked by CTFs on logs and periodically compiled by the MIOC into a BDA summary for forwarding to the JFC. The MOC targeting team and tactical commands contribute to and use the result of CA. Combat assessment requirements will be considered during target development planning to provide prioritization for ISR assets for post-strike collection. Combat assessment information will be entered into the JTL target folders and used by the MIOC (and other components) during subsequent target development. This information feeds an understanding of the operational environment for making recommendations for targeting guidance changes and follow-on planning.

2. Collection Management. Requests for ISR collection for CA purposes are matched against desired lethal or nonlethal effects and are planned in parallel with target development during collection management. These collection requirements will include potential indicators of desired effects, last time of value, and who needs the information.

Like CA, CM is a combined MOC and tactical-level effort. The MIOC collection management branch manages the effort within the MOC to collect pre- and post-strike intelligence on planned targets. Much of this effort is focused on coordinating joint collection to cover gaps in maritime collection efforts. The MPTL is used by the CM branch to establish collection requirements. The CWC/CTFs and each warfare commander will collect target intelligence using assigned assets. These results feed into the overall maritime collection effort.

3. CM and CA Support of Dynamic Targeting. Collection management and the subsequent combat assessment for dynamic targets are coordinated directly among COPS MDT/fires and ISR operations watch standers and the principal warfare commander responsible for prosecuting the target. For IO, coordination
with USCYBERCOM is required. Collection management and combat assessment personnel involved in
dynamic targeting will use JADOCs for dynamic coordination.

E.3 MARITIME TARGETING WORKING GROUP AND MARITIME TARGETING COORDINATION
BOARD

The maritime commander will establish a maritime targeting working group and a maritime targeting
coordination board to conduct targeting oversight functions. Maritime targeting working group and MTCB
functions include coordinating targeting information, providing targeting guidance and priorities, and refining
maritime target sets.

1. The MTWG is a meeting of action officers from across the MOC and subordinate tactical commands
convened to develop targeting products for the MTCB decision. The MTWG is led by the MOC fires lead
or the FE targeting officer. Working group collaboration is achieved using classified VTC or networked
collaboration tools. The responsibilities of the MTWG include:

   a. Review, refine, or develop the commander’s targeting guidance.

   b. Collect MOC and subordinate maritime commanders’ target nomination lists and merge into a draft
      MPTL. The MPTL will be comprised of targets for servicing by organic maritime assets.

   c. Collect MOC and subordinate maritime commanders’ target nomination lists and merge into a draft
      MTNL. The MTNL will be comprised of targets outside the maritime AO or targets unable to be
      serviced by maritime assets. These targets require servicing by other joint forces.

   d. Coordinate development of the maritime commander’s MDT list. Coordinate daily TST nominations to
      the JFC.

   e. Coordinate development of maritime commander’s dynamic targeting guidance (MDT matrix) to
      include maritime dynamic target prioritization, engagement authority, and ROE and positive
      identification and CDE requirements. The MDT targeting guidance supplements the JFC TST targeting
      guidance.

   f. Forward the maritime targeting guidance to the AOC strategy division for consideration in developing
      the JFACC AOD. Forward the MTNL to the AOC TET for inclusion in the draft JIPTL.

   g. Support the intelligence CM branch representatives and the MCWG in determining ISR collection
      requirements to support targeting and combat assessment and inputs to the JIPCL.

2. The MTCB is a battle rhythm event that normally meets daily to approve and promulgate the MPTL, the
   MTNL, TST nominations, and designated maritime dynamic targets and to recommend the commander’s
targeting guidance. The scheduling of the MTCB must be aligned with the JFC battle rhythm and joint
targeting requirements. The MTCB ensures that warfare commanders are adequately represented in
maritime targeting and collections deliberations and that competing requirements are addressed and
prioritized.

   The MTCB is normally chaired by the deputy commander. All subordinate maritime commanders, as well
as key MOC principals (e.g., intelligence and operations targeting planners and the SJA), are represented at
the MTCB. If U.S. forces are operating as part of a combined force, coalition maritime forces may be
represented. MTCB functions include:

   a. Review and integrate maritime targeting efforts.

   b. Recommend targeting guidance changes.
c. Provide combat assessment updates.
d. Provide recommendations on ROE changes.
e. Review and approve the MPTL. Approve MTNL for submission into the JFC targeting process.
f. Approve TST nominations for submission to JTCB.
g. Approve MDT list.
h. Approve and disseminate the maritime commander’s targeting guidance.
i. Conduct targeting coordination.
j. Recommend approval of RTL and NSL inputs.
k. Review ISR/collection support to targeting and combat assessment requirements.
l. Resolve conflicting maritime targeting requirements.

The MTCB agenda includes:

1. Maritime operations update
   a. Targeting effort to date (compare predicted versus actual)
   b. Operation plan for the next 24 hours
   c. Future planned operations out to 48 hours and 72 hours
   d. Targeting strategy and guidance out to 96 hours
   e. Adversary and friendly activities
   f. Changes to ROE.

2. Subordinate command briefs
   a. Targeting effort to date
   b. Operation plan for the next 24 hours
   c. Future planned operations out to 48 hours and 72 hours
   d. Targeting requirements out to 72 hours
   e. Unresolved coordination issues.

3. Maritime target nomination list/MPTL review
   a. Draft MTNL/MPTL
   b. Conflicting requirements.
4. Collection management review
   a. Results from past 24-hour CM support to targeting and CA. Results should include not just scheduled sorties flown but which targeting CA information requirements were or were not satisfied.
   b. Collection management plan for targeting and combat assessment support for next 24 hours. Preview should include missions scheduled and collection targets.

5. Apportionment
   a. Conflicting apportionment requirements
   b. Apportionment recommendations.

6. Maritime targeting coordination
   a. MTWG targeting coordination, deconfliction, and synchronization results
   b. Changes to the TSTs, maritime dynamic targets, no-strike list, no-fire areas, and restricted fire areas lists
   c. Changes to IO and fire support coordination measures (FSCMs).

7. Targeting guidance change recommendations

8. Comments. The fires lead prepares a MTCB decision message for release following the MTCB chair decisions.
   a. Approved MPTL, MTNL, RTL, and NSL
   b. Approved maritime apportionment recommendations
   c. Approved commander’s targeting guidance
   d. Approved TST nominations and MDT list
   e. Approved changes to FSCMs.
APPENDIX F

Theater Security Cooperation Planning and Assessment

F.1 INTRODUCTION

Theater security cooperation (TSC) is a long-term endeavor with fairly consistent attributes across the fleets that heavily incorporates planning and assessment and, as such, is a useful example to further review the application of these phase zero functions. The following section outlines seven steps that provide a good general framework to facilitate effective planning and assessment of a TSC campaign:

F.2 TSC PLANNING AND ASSESSMENT STEPS

1. Develop a maritime coordination plan (MCP) as a maritime support plan to assigned or supported combatant commanders’ theater security cooperation plan (TSCP) or theater campaign plan (TCP). This plan describes the maritime activity that occurs during phase zero operations. Combatant commands commonly employ operational design to describe the objectives and effects the CCDR wants to achieve within the theater in the next 5–10 years, specifically the way he intends to shape relations with country partners, potential allies, military and civilian stakeholders, and rivals (or potential rivals). Much of this is in response to various country team objectives and State Department imperatives, but many times the CCDR’s TSCP or TCP is devised to sustain promising relationships while preparing for the most likely (or dangerous) theater or cross-seam contingencies. With the operational design aspects in place in the TSCP/TCP, it is generally best to develop support plans to focus on the maritime effects that can enhance the advancement of the CCDR’s intent over a 2–4-year cycle.

2. Integrate an assessment perspective when developing an MCP. In order to produce an MCP, MOCs will convene an OPT, in some cases as often as once per year to design a plan in accordance with a new commander’s intent or to simply revise the plan from the previous year. They start as all OPTs do: with mission analysis to determine the NCC’s mission responsibilities to the TCP. The written plan reflects the same attributes of any plan: objectives and desired conditions/effects; CONOPS; force allocation; timing and synchronization of action; messaging; “what if” (decision points, CCIR, and branch plans); assumptions; acceptable levels of risk; and sequels. The MCP differs only in that the goal is to remain in phase zero operations, while planning for the contingency to surge as necessary as conditions change within the theater. Planners consciously considering the assessment perspective, and assessment analysts involved in plan development, will make it much easier to later assess progress, implications, and provide any recommendations to change the plan. Peacetime activity revolves largely around shaping operations such as leadership conventions and meetings, bilateral or multinational exercises, foreign engagement opportunities, port visits, planning conferences, military assistance, and training. An assessment perspective can help the OPT arrive at a reasonable rate of return for these investments in activity. The weight of activity from country to country depends largely on the commander’s intent, and assessment can help determine the risk of investing in one activity over another on a routine basis.

3. Develop measurable conditions, goals, and milestones that identify the commander’s 5-year intent. Effective measurable conditions within phase zero operations are based in the realm of the possible. It may be reasonable to anticipate that one country will continue maritime cooperation if the past level and nature or interactions remain constant, while improved maritime cooperation with another country may be anticipated by more interactions such as exercises, training, military support, port visits, and official visits.
by U.S. leadership. It becomes difficult to quantify the return on investment from each activity; as a result, experienced planners will write conditions and goals so that they can be measured more objectively than subjectively. The key to a good MCP condition is to design goals in planning that are achievable within the MCP cycle and can be measured easily. More often than not, the goal for friendly and neutral countries is to maintain a status quo so as not to upset the balance. As a result, conditions are defined more by the thresholds that trigger undesired conditions than those that define positive results.

4. Develop simple measures of performance and measures of effectiveness to identify how well the MCP is being executed. Simplicity is the key. Measures of performance are related specifically to whether or not an activity was completed as planned. Examples related to the MCP would be the completion of a commander’s visit to a foreign country or interest, completion of a bilateral exercise as planned, or a port visit. MOEs are a little more complex but involve similar indicators such as a positive response or outbrief during a collective after action review after an exercise event, flag staff reports following an official visit by flag leadership, or CO’s comments/embassy feedback after a ship’s port visit. The indicators help feed MOEs that identify proximity to long-term conditions. These MOEs are also usually simple, such as “continued demand by country X for further engagement,” but may also be defined by undesired effects, such as “country X closes ports to U.S. vessels.” Since each activity is iterative, the best an assessment team may hope for in terms of fulfilling conditions is a collective of positive indicators, but in some cases the feedback may be more concrete if supported by messages from the countries in question. Use whatever indicators are available to support simple MOEs and measure them on a routine (usually monthly) basis.

5. Align the key leader engagement strategy. Develop a long-range engagement plan in accordance with the approved MCP and proposed engagement opportunities, deconflicted with the CCMD and embassies, as necessary. Desk officers generally start preparing for each engagement several months out from the date of departure. Whenever the commander or other senior staff member is scheduled for an engagement with a significant foreign maritime partner, the TSC lead should prepare a trip book for him to study. The book may include details of any previous visits by U.S. civilian or military partners, reports from the last leadership visit, a subjective assessment based on monthly country assessment reports, desk officer inputs, communication imperatives, recommended talking points, and upcoming port visits/exercises/other bilateral opportunities, as well as the names of any other foreign interests he may seek to engage. Once the visit is complete, the TSC lead and flag office work together to develop a trip report that identifies indicators of positive movement, challenges, and opportunities for further engagement. A lot of effort goes into this type of phase zero activity but this level of investment is necessary to advance the phase zero goals of the fleet. The level of effort they placed on planning and assessing MCP provides the return needed to develop future courses of action.

6. Discuss key indicators of partner engagement across the staff. Although MOEs associated with phase zero effects and conditions may be very subjective, they become easier to understand with multiple indicators from around the staff. Some MOCs have determined the need to conduct operational assessment on a regular and routine basis within their monthly battle rhythm. As an effective practice, a MOC may convene an assessment working group on a monthly basis to review progress of the conditions, MOEs, and MOPs defined in the MCP. An assigned staff officer may review general MOPs, while other members of the staff provide feedback and indicators based on the activity within their functions. For example, intelligence provides indicators of changed threat status; log provides inputs regarding foreign assistance, aerial port of debarkation and seaport of debarkation status; N3 discusses port visits and bilateral maritime activities; N37 discusses exercises. The collective indicators give a better view of MOEs and collective conditions across the theater. Provide MCP assessment updates on a regular basis. This might be a monthly input to the CUB, discussing the assessment of theater-wide activity against the MCP and CCDR’s TCP, based on past activity and achieved conditions (or movement towards achieving those conditions). Staffs that present their assessments during a CUB generally facilitate better cross-staff understanding of the assessment process and the relationship to planning activities.

7. Schedule periodic assessment sessions that purposely focus on the longer term. Hold quarterly, semi-annual, or annual TSC assessment sessions as appropriate in which the commander is presented with plan progression, implications of current status to the plan, including environment changes and any
recommendations. The fact that conditions will change over time is almost certain, as is a range of results in the achievement of desired effects. This is the time to brief the commander and get updated guidance on the long-term strategy which could result in plan changes and revisions of MOEs/MOPs.
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JP 3-0, Joint Operations

JP 3-09, Joint Fire Support

JP 3-13, Information Operations

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NWP 3-13, Navy Information Operations
NWP 3-30, Naval Command and Control of Air Operations (Organizations and Processes)
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TM 3-32.1-10, Maritime Domain Awareness
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GLOSSARY

adaptive planning and execution system (APEX system). A Department of Defense system of joint policies, processes, procedures, and reporting structures, supported by communications and information technology, that is used by the joint planning and execution community to monitor, plan, and execute mobilization, deployment, employment, sustainment, redeployment, and demobilization activities associated with joint operations. (JP 1-02. Source: JP 5-0).

air support request (AIRSUPREQ). A means to request preplanned and immediate close air support, air interdiction, air reconnaissance, surveillance, escort, helicopter airlift, and other aircraft missions. (JP 1-02. Source: JP 3-30)

air tasking order (ATO). A method used to task and disseminate to components, subordinate units, and command and control agencies projected sorties, capabilities and/or forces to targets and specific missions. Normally provides specific instructions to include call signs, targets, controlling agencies, etc., as well as general instructions. (JP 1-02. Source: JP 3-30)

airspace control order (ACO). An order implementing the airspace control plan that provides the details of the approved requests for airspace coordinating measures. It is published either as part of the air tasking order or as a separate document. (JP 1-02. Source: JP 3-52)

airspace control plan (ACP). The document approved by the joint force commander that provides specific planning guidance and procedures for the airspace control system for the joint force operational area. (JP 1-02. Source: JP 3-52)

alert order (ALERTORD). A planning directive that provides essential planning guidance, directs the initiation of execution planning after the directing authority approves a military course of action, but does not authorize execution. (JP 1-02. Source: JP 5-0)

allocation. Distribution of limited forces and resources for employment among competing requirements. (JP 1-02. Source: JP 5-0)

allocation request (ALLOREQ). A message used to provide an estimate of the total air effort, to identify any excess and joint force general support aircraft sorties, and to identify unfilled air requirements. This message is used only for preplanned missions and is transmitted on a daily basis, normally 24 hours prior to the start of the next air tasking day. (JP 1-02. Source: JP 3-30)

apportionment. In the general sense, distribution of forces and capabilities as the starting point for planning. (JP 1-02. Source: JP 5-0)

area of interest (AOI). That area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory. This area also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission. (JP 1-02. Source: JP 3-0)

area of operations (AO). An operational area defined by the joint force commander for land and maritime forces that should be large enough to accomplish their missions and protect their forces. (JP 1-02. Source: JP 3-0)

assessment. 1. A continuous process that measures the overall effectiveness of employing joint force capabilities during military operations. 2. Determination of the progress toward accomplishing a task, creating
a condition, or achieving an objective. 3. Analysis of the security, effectiveness, and potential of an existing or planned intelligence activity. 4. Judgment of the motives, qualifications, and characteristics of present or prospective employees or “agents.” (JP 1-02. Source: JP 3-0)

assumption. A supposition on the current situation or a presupposition on the future course of events, either or both assumed to be true in the absence of positive proof, necessary to enable the commander in the process of planning to complete an estimate of the situation and make a decision on the course of action. (JP 1-02. Source: JP 5-01)

battle damage assessment (BDA). The estimate of damage composed of physical and functional damage assessment, as well as target system assessment, resulting from the application of lethal or nonlethal military force. (JP 1-02. Source: JP 3-0)

board. An organized group of individuals within a joint force commander’s headquarters, appointed by the commander (or other authority) that meets with the purpose of gaining guidance or decision. Its responsibilities and authority are governed by the authority which established the board. (JP 3-33)

branch. 1. A subdivision of any organization. 2. A geographically separate unit of an activity, which performs all or part of the primary functions of the parent activity on a smaller scale. 3. An arm or service of the Army. 4. The contingency options built into the base plan used for changing the mission, orientation, or direction of movement of a force to aid success of the operation based on anticipated events, opportunities, or disruptions caused by enemy actions and reactions. (JP 1-02. Source: JP 5.0)

bureau. A long-standing functional organization, with a supporting staff designed to perform a specific function or activity within a joint force commander’s headquarters. (JP 3-33)

campaign. A series of related major operations aimed at achieving strategic and operational objectives within a given time and space. (JP 1-02. Source: JP 5-0)

campaign plan. A joint operation plan for a series of related major operations aimed at achieving strategic or operational objectives within a given time and space. (JP 1-02. Source: JP 5-0)

cell. A subordinate organization formed around a specific process, capability, or activity within a designated larger organization of a joint force commander’s headquarters. (JP 1-02. Source: JP 3-33)

center. An enduring functional organization, with a supporting staff, designed to perform a joint function within a joint force commander’s headquarters. (JP 1-02. Source: JP 3-33)

center of gravity (COG). The source of power that provides moral or physical strength, freedom of action, or will to act. (JP 1-02. Source: JP 5-0)

civil affairs (CA). Designated Active and Reserve Component forces and units organized, trained, and equipped specifically to conduct civil affairs operations and to support civil-military operations. (JP 1-02. Source: JP 3-57)

coalition. An arrangement between two or more nations for common action. (JP 1-02. Source: JP 5-0)

collection plan. A plan for collecting information from all available sources to meet intelligence requirements and for transforming those requirements into orders and requests to appropriate agencies. (JP 1-02. Source: JP 2-01)

collection requirement. An established intelligence need, validated against the appropriate allocation of intelligence resources (as a requirement) to fulfill the essential elements of information and other intelligence needs of an intelligence consumer. (JP 1-02. Source: JP 2-01.2)
combatant command. A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Combatant commands typically have geographic or functional responsibilities. (JP 1-02. Source: JP 5-0)

combatant commander (CCDR). A commander of one of the unified or specified combatant commands established by the President. (JP 1-02. Source: JP 3-0)

combined. Between two or more forces or agencies of two or more allies. (When all allies or services are not involved, the participating nations and services shall be identified, e.g., combined navies.) (JP 1-02. Source: N/A)

command (CMD). 1. The authority that a commander in the armed forces lawfully exercises over subordinates by virtue of rank or assignment. Command includes the authority and responsibility for effectively using available resources and for planning the employment of, organizing, directing, coordinating, and controlling military forces for the accomplishment of assigned missions. It also includes responsibility for health, welfare, morale, and discipline of assigned personnel. 2. An order given by a commander; that is, the will of the commander expressed for the purpose of bringing about a particular action. 3. A unit or units, an organization, or an area under the command of one individual. (JP 1-02. Source: JP 1)

command and control (C2). The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission. (JP 1-02. Source: JP 1)

command relationships. The interrelated responsibilities between commanders, as well as the operational authority exercised by commanders in the chain of command; defined further as combatant command (command authority), operational control, tactical control, or support. (JP 1-02. Source: JP 1)

commander’s critical information requirement (CCIR). An information requirement identified by the commander as being critical to facilitating timely decision making. (JP 1-02. Source: JP 3-0)

commander’s intent. A clear and concise expression of the purpose of the operation and the desired military end state that supports mission command, provides focus to the staff, and helps subordinate and supporting commanders act to achieve the commander’s desired results without further orders, even when the operation does not unfold as planned. (JP 1-02. Source: JP 3-0)

concept of operations (CONOPS). A verbal or graphic statement that clearly and concisely expresses what the joint force commander intends to accomplish and how it will be done using available resources. (JP 1-02. Source: JP 5-0)

constraint. In the context of joint operation planning, a requirement placed on the command by a higher command that dictates an action, thus restricting freedom of action. (JP 1-02. Source: JP 5-0)

contingency. A situation requiring military operations in response to natural disasters, terrorists, subversives, or as otherwise directed by appropriate authority to protect US interests. (JP 1-02. Source: JP 5-0)

control. 1. Authority that may be less than full command exercised by a commander over part of the activities of subordinate or other organizations. (JP 1-02. Source: JP 1) 2. In mapping, charting, and photogrammetry, a collective term for a system of marks or objects on the Earth or on a map or a photograph, whose positions or elevations (or both) have been or will be determined. (JP 1-02. Source: JP 2-03) 3. Physical or psychological pressures exerted with the intent to assure that an agent or group will respond as directed. (JP 1-02. Source: JP 3-0) 4. An indicator governing the distribution and use of documents, information, or material. Such
indicators are the subject of intelligence community agreement and are specifically defined in appropriate regulations. (JP 1-02. Source: JP 2-01)

crisis. An incident or situation involving a threat to the United States, its citizens, military forces, or vital interests that develops rapidly and creates a condition of such diplomatic, economic, or military importance that commitment of military forces and resources is contemplated to achieve national objectives. (JP 1-02. Source: JP 3-0)

crisis action planning (CAP). The Adaptive Planning and Execution system process involving the time-sensitive development of joint operation plans and operation orders for the deployment, employment, and sustainment of assigned and allocated forces and resources in response to an imminent crisis. (JP 1-02. Source: JP 5-0)

critical factor (CF). An attribute considered crucial for the accomplishment of the objective that describes the environment (in relationship to the objective) and must be identified and classified as either sufficient (critical strength) or insufficient (critical weakness). (NTRP 1-02)

critical information. Specific facts about friendly intentions, capabilities, and activities vitally needed by adversaries for them to plan and act effectively so as to guarantee failure or unacceptable consequences for friendly mission accomplishment. (JP 1-02. Source: JP 2-0)

critical strength. A capability considered vital for the accomplishment of a given or assumed military objective. (NTRP 1-02)

critical weaknesses. Aspects or components of the adversary’s capabilities that are deficient or vulnerable to neutralization, interdiction, or attack in a manner achieving decisive or significant results, disproportionate to the military sources. (NTRP 1-02)

decisive point. A geographic place, specific key event, critical factor, or function that, when acted upon, allows commanders to gain a marked advantage over an adversary or contribute materially to achieving success. (JP 1-02. Source: JP 5-0)

direct support (DS). A mission requiring a force to support another specific force and authorizing it to answer directly to the supported force’s request for assistance. (JP 1-02. Source: JP 3-09.3)

effect. 1. The physical or behavioral state of a system that results from an action, a set of actions, or another effect. 2. The result, outcome, or consequence of an action. 3. A change to a condition, behavior, or degree of freedom. (JP 1-02. Source: JP 3-0)

electronic warfare (EW). Military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. (JP 1-02. Source: JP 3-13.1)

element. An organization formed around a specific function within a designated directorate of a joint force commander’s headquarters. (JP 1-02. Source: JP 3-33)

essential elements of friendly information (EEFI). Key questions likely to be asked by adversary officials and intelligence systems about specific friendly intentions, capabilities, and activities, so they can obtain answers critical to their operational effectiveness. (JP 1-02. Source: JP 2-01)

execute order (EXORD). 1. An order issued by the Chairman of the Joint Chiefs of Staff, at the direction of the Secretary of Defense, to implement a decision by the President to initiate military operations. 2. An order to initiate military operations as directed. (JP 1-02. Source: JP 5-0)

expeditionary force. An armed force organized to accomplish a specific objective in a foreign country. (JP 1-02. Source: JP 3-0)
fires. The use of weapon systems to create a specific lethal or nonlethal effects on a target. (JP 1-02. Source: JP 3-09)

fire support coordination measure. A measure employed by commanders to facilitate the rapid engagement of targets and simultaneously provide safeguards for friendly forces. (JP 1-02. Source: JP 3-0)

force protection (FP). Preventive measures taken to mitigate hostile actions against Department of Defense personnel (to include family members), resources, facilities, and critical information. (JP 1-02. Source: JP 3-0)

fragmentary order (FRAGORD). An abbreviated form of an operation order issued as needed after an operation order to change or modify that order or to execute a branch or sequel to that order. (JP 1-02. Source: JP 5-0)

group (GP). A long-standing functional organization that is formed to support a broad function within a joint force commander’s headquarters. (JP 1-02. Source: JP 3-33)

human intelligence (HUMINT). A category of intelligence derived from information collected and provided by human sources. (JP 1-02. Source: JP 2-0)

information assurance (IA). Measures that protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality, and nonrepudiation, which includes providing for restoration of information systems by incorporating protection, detection, and reaction capabilities. (JP 1-02. Source: JP 3-33)

information operations (IO). The integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own. (JP 1-02. Source: SecDef Memo 12401-10)

intelligence. The product resulting from the collection, processing, integration, evaluation, analysis, and interpretation of available information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity which results in the product and to the organizations engaged in such activity. (JP 1-02. Source: JP 2-0)

intelligence requirement. 1. Any subject, general or specific, upon which there is a need for the collection of information, or the production of intelligence. 2. A requirement for intelligence to fill a gap in the command’s knowledge or understanding of the operational environment or threat forces. (JP 1-02. Source: JP 2-0)

intelligence source. The means or system that can be used to observe and record information relating to the condition, situation, or activities of a targeted location, organization, or individual. An intelligence source can be people, documents, equipment, or technical sensors. (JP 1-02. Source: JP 2-0)

intergovernmental organization (IGO). An organization created by a formal agreement between two or more governments on a global, regional, or functional basis to protect and promote national interests shared by member states. (JP 1-02. Source: JP 3-08)

interoperability. 1. The ability to operate in synergy in the execution of assigned tasks. (JP 1-02. Source: JP 3-0) 2. The condition achieved among communications-electronics systems or items of communications-electronics equipment when information or services can be exchanged directly and satisfactorily between them and/or their users. The degree of interoperability should be defined when referring to specific cases. (JP 1-02. Source: JP 6-0)

joint air operations plan (JAOP). A plan for a connected series of joint air operations to achieve the joint force commander’s objectives within a given time and joint operational area. (JP 1-02. Source: JP 3-30)
joint force. A general term applied to a force composed of significant elements, assigned or attached, of two or more Military Departments operating under a single joint force commander. (JP 1-02. Source: JP 3-0)

joint force air component commander (JFACC). The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for recommending the proper employment of assigned, attached, and/or made available for tasking air forces; planning and coordinating air operations; or accomplishing such operational missions as may be assigned. (JP 1-02. Source: JP 3-0)

joint force commander (JFC). A general term applied to a combatant commander, subunified commander, or joint task force commander authorized to exercise combatant command (command authority) or operational control over a joint force. (JP 1-02. Source: JP 1)

joint force land component commander (JFLCC). The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for recommending the proper employment of assigned, attached, and/or made available for tasking land forces; planning and coordinating land operations; or accomplishing such operational missions as may be assigned. (JP 1-02. Source: JP 3-0)

joint force maritime component commander (JFMCC). The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for recommending the proper employment of assigned, attached, and/or made available for tasking maritime forces and assets; planning and coordinating maritime operations; or accomplishing such operational missions as may be assigned. (JP 1-02. Source: JP 3-0)

joint functions. Related capabilities and activities placed into six basic groups of command and control, intelligence, fires, movement and maneuver, protection, and sustainment to help joint force commanders synchronize, integrate, and direct joint operations. (JP 1-02. Source: JP 3-0)

joint integrated prioritized target list (JIPTL). A prioritized list of targets approved and maintained by the joint force commander. Targets and priorities are derived from the recommendations of components and other appropriate agencies, in conjunction with their proposed operations supporting the joint force commander’s objectives and guidance. (JP 1-02. Source: JP 3-60)


joint operations. A general term to describe military actions conducted by joint forces and those Service forces employed in specified command relationships with each other, which of themselves, do not establish joint forces. (JP 1-02. Source: JP 3-0)

joint planning group (JPG). A planning organization consisting of designated representatives of the joint force headquarters principal and special staff sections, joint force components (Service and/or functional), and other supporting organizations or agencies as deemed necessary by the joint force commander. (JP 1-02. Source: JP 5-0)

Joint Public Affairs Support Element (JPASE). A deployable unit assigned to assist a joint force commander in developing and training public affairs forces in joint, interagency and multinational environments. (JP 1-02, Source: JP 3-61)

joint targeting coordination board (JTCB). A group formed by the joint force commander to accomplish broad targeting oversight functions that may include but are not limited to coordinating targeting information, providing targeting guidance and priorities, and refining the joint integrated prioritized target list. The board is normally comprised of representatives from the joint force staff, all components, and if required, component subordinate units. (JP 1-02. Source: JP 3-60)
**joint task force (JTF).** A joint force that is constituted and so designated by the Secretary of Defense, a combatant commander, a subunified commander, or an existing joint task force commander. (JP 1-02. Source: JP 1)

**law of war.** That part of international law that regulates the conduct of armed hostilities. (JP 1-02. Source: JP 1-04)

**littoral.** The littoral comprises two segments of operational environment: 1. Seaward: the area from the open ocean to the shore, which must be controlled to support operations ashore. 2. Landward: the area inland from the shore that can be supported and defended directly from the sea. (JP 1-02. Source: JP 3-32)

**logistics.** Planning and executing the movement and support of forces. It includes those aspects of military operations that deal with: a. design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; b. movement, evacuation, and hospitalization of personnel; c. acquisition or construction, maintenance, operation, and disposition of facilities; and d. acquisition or furnishing of services. (JP 1-02. Source: JP 4-0)

**maneuver.** 1. A movement to place ships, aircraft, or land forces in a position of advantage over the enemy. 2. A tactical exercise carried out at sea, in the air, on the ground, or on a map in imitation of war. 3. The operation of a ship, aircraft, or vehicle, to cause it to perform desired movements. 4. Employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy. (JP 1-02. Source: JP 3-0)

**maritime domain.** The oceans, seas, bays, estuaries, islands, coastal areas, and the airspace above these, including the littorals. (JP 1-02. Source: JP 3-32)

**maritime support request.** A request submitted by the maritime service components and subordinate commanders to the joint force maritime component commander for support assets. (NTRP 1-02)

**master air attack plan (MAAP).** A plan that contains key information that forms the foundation of the joint air tasking order. Sometimes referred to as the air employment plan or joint air tasking order shell. Information that may be found in the plan includes joint force commander guidance, joint force air component commander guidance, support plans, component requests, target update requests, availability of capabilities and forces, target information from target lists, aircraft allocation, etc. (JP 1-02. Source: JP 3-60)

**measure of effectiveness (MOE).** A criterion used to assess changes in system behavior, capability, or operational environment that is tied to measuring the attainment of an end state, achievement of an objective, or creation of an effect. (JP 1-02. Source: JP 3-0)

**measure of performance (MOP).** A criterion used to assess friendly actions that is tied to measuring task accomplishment. (JP 1-02. Source: JP 3-0)

**military deception (MILDEC).** Actions executed to deliberately mislead adversary military, paramilitary, or violent extremist organization decision makers, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly mission (JP 1-02. Source: JP 3-13.4)

**military information support operations (MISO).** Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals in a manner favorable to the originator’s objectives. (JP 1-02. Source: JP 3-13.2)

**mission.** 1. The task, together with the purpose, that clearly indicates the action to be taken and the reason therefore. (JP 1-02. Source: JP 3-0) 2. In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task. (JP 1-02. Source: JP 3-0) 3. The dispatching of one or more aircraft to accomplish one particular task. (JP 1-02. Source: JP 3-30)
**mission command.** The conduct of military operations through decentralized execution based upon mission-type orders. (JP 1-02. Source: JP 3-31)

**multinational.** Between two or more forces or agencies of two or more nations or coalition partners. (JP 1-02. Source: JP 5-0)

**objective.** 1. The clearly defined, decisive, and attainable goal toward which every operation is directed. 2. The specific target of the action taken which is essential to the commander’s plan. (JP 1-02. Source: JP 5-0)

**office.** An enduring organization that is formed around a specific function within a joint force commander’s headquarters to coordinate and manage support requirements. (JP 1-02. Source: JP 3-33)


**operational control (OPCON).** Command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control is inherent in combatant command (command authority) and may be delegated within the command. Operational control is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and Service and/or functional component commanders. Operational control normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions; it does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. (JP 1-02. Source: JP 1)

**operation order (OPORD).** A directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation. (JP 1-02. Source: JP 5-0)

**operation plan (OPLAN).** 1. Any plan for the conduct of military operations prepared in response to actual and potential contingencies. 2. A complete and detailed joint plan containing a full description of the concept of operations, all annexes applicable to the plan and a time-phased force and deployment data (JP 1-02. Source: JP 5-0).

**operations security (OPSEC).** A process of identifying critical information and subsequently analyzing friendly actions attendant to military operations and other activities. (JP 1-02. Source: JP 3-13.3)

**planning order (PLANORD).** A planning directive that provides essential planning guidance and directs the initiation of execution planning before the directing authority approves a military course of action. (JP 1-02. Source: JP 5-0)

**planning team.** A functional element within a joint force commander’s headquarters established to solve problems related to a specific task or requirement, and which dissolves upon completion of the assigned task. (JP 1-02. Source: JP 3-33)

**priority intelligence requirement (PIR).** An intelligence requirement, stated as a priority for intelligence support, that the commander and staff need to understand the adversary or other aspects of the operational environment. (JP 1-02. Source: JP 2-01)
public affairs (PA). Those public information, command information, and community engagement activities directed toward both the external and internal publics with interest in the Department of Defense. (JP 1-02. Source: JP 3-61)

reconnaissance (RECON). A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area. (JP 1-02. Source: JP 2-0)

request for information (RFI). 1. Any specific time-sensitive ad hoc requirement for intelligence information or products to support an ongoing crisis or operation not necessarily related to standing requirements or scheduled intelligence production. A request for information can be initiated to respond to operational requirements and will be validated in accordance with the combatant command’s procedures. 2. The National Security Agency/Central Security Service uses this term to state ad hoc signals intelligence requirements. (JP 1-02. Source: JP 2-0)

rules for the use of force (RUF). Directives issued to guide United States forces on the use of force during various operations. These directives may take the form of execute orders, deployment orders, memoranda of agreement, or plans. (JP 1-02. Source: JP 3-28)

rules of engagement (ROE). Directives issued by competent military authority that delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered. (JP 1-02. Source: JP 1-04)

sequel. The subsequent major operation or phase based on the possible outcomes (success, stalemate, or defeat) of the current major operation or phase. (JP 1-02. Source: JP 5-0)

standard operating procedure (SOP). A set of instructions covering those features of operations which lend themselves to a definite or standardized procedure without loss of effectiveness. The procedure is applicable unless ordered otherwise. (JP 1-02. Source: N/A)

strike. An attack to damage or destroy an objective or a capability. (JP 1-02. Source: JP 3-0)

subordinate command. A command consisting of the commander and all those individuals, units, detachments, organizations, or installations that have been placed under the command by the authority establishing the subordinate command. (JP 1-02. Source: JP 1)

support. 1. The action of a force that aids, protects, complements, or sustains another force in accordance with a directive requiring such action. 2. A unit that helps another unit in battle. 3. An element of a command that assists, protects, or supplies other forces in combat. (JP 1-02. Source: JP 1)

supported commander. 1. The commander having primary responsibility for all aspects of a task assigned by the Joint Strategic Capabilities Plan or other joint operation planning authority. 2. In the context of joint operation planning, the commander who prepares operation plans or operation orders in response to requirements of the Chairman of the Joint Chiefs of Staff. 3. In the context of a support command relationship, the commander who receives assistance from another commander’s force or capabilities, and who is responsible for ensuring that the supporting commander understands the assistance required. (JP 1-02. Source: JP 3-0)

surveillance. The systematic observation of aerospace, surface, or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means. (JP 1-02. Source: JP 3-0)

synchronization. 1. The arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive place and time. 2. In the intelligence context, application of intelligence sources and methods in concert with the operation plan to ensure intelligence requirements are answered in time to influence the decisions they support. (JP 1-02. Source: JP 2-0)
tactical control (TACON). Command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish missions or tasks assigned. Tactical control is inherent in operational control. Tactical control may be delegated to, and exercised at any level at or below the level of combatant command. Tactical control provides sufficient authority for controlling and directing the application of force or Tactical use of combat support assets within the assigned mission or task. (JP 1-02. Source: JP 1)

targeting. The process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities. (JP 1-02. Source: JP 3-0)

theater of operations (TO). An operational area defined by the geographic combatant commander for the conduct or support of specific military operations. (JP 1-02. Source: JP 3-0)

time-phased force and deployment data (TPFDD). The time-phased force data, non-unit cargo and personnel data, and movement data for the operation plan or operation order, or ongoing rotation of forces. (JP 1-02. Source: JP 5-0)

time-sensitive target (TST). A joint force commander designated target requiring immediate response because it is a highly lucrative, fleeting target of opportunity or it poses (or will soon pose) a danger to friendly forces. (JP 1-02. Source: JP 3-60)

unified action. The synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort. (JP 1-02. Source: JP 1)

vulnerability assessment (VA). A Department of Defense, command, or unit-level evaluation (assessment) to determine the vulnerability of a terrorist attack against an installation, unit, exercise, port, ship, residence, facility, or other site. Identifies areas of improvement to withstand, mitigate, or deter acts of violence or terrorism. (JP 1-02. Source: JP 3-07.2)

warning order (WARNORD). 1. A preliminary notice of an order or action that is to follow. 2. A planning directive that initiates the development and evaluation of military courses of action by a supported commander and requests that the supported commander submit a commander’s estimate. 3. A planning directive that describes the situation, allocates forces and resources, establishes command relationships, provides other initial planning guidance, and initiates subordinate unit mission planning. (JP 1-02. Source: JP 5-0)

working group (WG). An enduring or ad hoc organization within a joint force commander’s headquarters consisting of a core functional group and other staff and component representatives whose purpose is to provide analysis on the specific function to users (JP 1-02. Source: JP 3-33)
# LIST OF ACRONYMS AND ABBREVIATIONS

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<td>area air defense plan</td>
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<td>ASW</td>
<td>antisubmarine warfare</td>
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<td>ATO</td>
<td>air tasking order</td>
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<tr>
<td>B2C2</td>
<td>board, bureaus, centers, and cells</td>
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<tr>
<td>BDA</td>
<td>battle damage assessment</td>
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</table>
BDAREP  battle damage assessment report
BMD  ballistic missile defense
BR  battle rhythm
BWC  battle watch captain
C-3  coalition force Operations Directorate
C2  command and control
C2C2WG  command and control of command control working group
C4F  Commander, Fourth Fleet
C4ISR  command, control, communications, computers, intelligence, surveillance, and reconnaissance
C10F  Commander, Tenth Fleet
CA  combat assessment
CAL  critical asset list
CAOC  combined air operations center
CAP  crisis action planning
CASOP  crisis action standing operating procedure
CAT  crisis action team
CBRNE  chemical, biological, radiological, nuclear, and high-yield explosives
CC  component command (NATO)
CCDR  combatant commander
CCIR  commander’s critical information requirement
CCMD  combatant command
CDE  collateral damage estimation
CFT  cross-functional team
CI  counterintelligence
CIE  collaborative information environment
CIFA  counterintelligence field activity
CIS  communications and information systems
<table>
<thead>
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<td>CTF</td>
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<td>composite warfare commander</td>
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<td>defended asset list</td>
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<td>Deployment and Distribution Operations Center (USTRANSCOM)</td>
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<td>DEPORD</td>
<td>deployment order</td>
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<td>DIA</td>
<td>Defense Intelligence Agency</td>
</tr>
<tr>
<td>DIL</td>
<td>disconnected, interrupted, low band width</td>
</tr>
<tr>
<td>DIM</td>
<td>daily intentions message</td>
</tr>
<tr>
<td>DIRLAUTH</td>
<td>direct liaison authorized</td>
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<td>DLA</td>
<td>Defense Logistics Agency</td>
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<td>DOD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>DR</td>
<td>disaster relief</td>
</tr>
<tr>
<td>DSCA</td>
<td>defense support of civil authorities</td>
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<tr>
<td>EAWG</td>
<td>effects assessment working group</td>
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<tr>
<td>ECOA</td>
<td>enemy course of action</td>
</tr>
<tr>
<td>ECOG</td>
<td>enemy center of gravity</td>
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<td>EOD</td>
<td>explosive ordnance disposal</td>
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<td>EPAD</td>
<td>exploitation, production, analysis, and dissemination</td>
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<td>F2T2EA</td>
<td>find, fix, track, target, engage, and assess</td>
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<td>FDO</td>
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<td>FE</td>
<td>fires element</td>
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<td>foreign humanitarian assistance</td>
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<td>FHP</td>
<td>force health protection</td>
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<td>fleet information operations center</td>
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<td>foreign intelligence and security services</td>
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<td>fleet logistics center</td>
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<td>future operations</td>
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<td>FRAGORD</td>
<td>fragmentary order</td>
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<td>Global Positioning System</td>
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<td>HHQ</td>
<td>higher headquarters</td>
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<td>HN</td>
<td>host nation</td>
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<td>high-payoff target</td>
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<td>high-value target</td>
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<td>headquarters</td>
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<td>human intelligence</td>
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<td>indications and warning</td>
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<td>ID</td>
<td>identification</td>
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<td>IER</td>
<td>information exchange requirement</td>
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<tr>
<td>IGL</td>
<td>intelligence gain/lost</td>
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<td>IGO</td>
<td>intergovernmental organization</td>
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<td>IIR</td>
<td>intelligence information report</td>
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<td>IM</td>
<td>information management</td>
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<td>intel</td>
<td>intelligence</td>
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<td>IPOE</td>
<td>intelligence preparation of the operational environment</td>
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<td>information-related capability</td>
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<td>intelligence support element</td>
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<td>intelligence, surveillance, and reconnaissance</td>
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<td>manpower and personnel division</td>
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<td>J–2x</td>
<td>joint force counterintelligence and human intelligence staff element</td>
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<td>J–6</td>
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<td>Joint Staff Deputy Director for Global Operations</td>
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<td>JADOCs</td>
<td>Joint Automated Deep Operations Coordination System</td>
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<td>joint communication control center</td>
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<td>Joint Collection Management Board</td>
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<td>joint effects coordination cell (DOD)</td>
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<td>joint/coalition force maritime component commander</td>
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<td>joint fires element</td>
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<td>JFSOCC</td>
<td>joint force special operations component commander</td>
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<td>JIOC</td>
<td>joint intelligence operations center</td>
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<td>JIPOE</td>
<td>joint intelligence preparation of the operational environment</td>
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<td>Description</td>
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<tr>
<td>JIPTL</td>
<td>joint integrated prioritized target list</td>
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<td>JISE</td>
<td>joint intelligence support element</td>
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<td>joint manning document</td>
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<td>JMIISTF</td>
<td>joint military information support task force</td>
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<td>JOA</td>
<td>joint operations area</td>
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<td>JOC</td>
<td>joint operations center</td>
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<td>Joint Operation Planning and Execution System</td>
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<td>JOPP</td>
<td>joint operation planning process</td>
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<td>JPG</td>
<td>joint planning group</td>
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<td>joint personnel recovery center</td>
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<td>joint reconnaissance center</td>
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<td>joint restricted frequency list</td>
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<td>JTCB</td>
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<td>JTF</td>
<td>joint task force</td>
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<tr>
<td>JTL</td>
<td>joint target list</td>
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<tr>
<td>JTT</td>
<td>joint targeting toolbox</td>
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<tr>
<td>JTWG</td>
<td>joint targeting working group</td>
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<tr>
<td>JWICS</td>
<td>Joint Worldwide Intelligence Communications System</td>
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<td>KIM</td>
<td>knowledge and information management</td>
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<td>KIMB</td>
<td>knowledge and information management board</td>
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<td>KIMP</td>
<td>knowledge and information management plan</td>
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<td>knowledge and information management working group</td>
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<td>KM</td>
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<td>knowledge management officer</td>
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<tr>
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<td>liaison officer</td>
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<tr>
<td>LOAC</td>
<td>law of armed conflict</td>
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<tr>
<td>LOGSITREP</td>
<td>logistics situation report</td>
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<td>LOI</td>
<td>letter of instruction</td>
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<td>line of operation</td>
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<td>line of sight</td>
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<td>logistics readiness center</td>
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<td>mortuary affairs</td>
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<td>MAAP</td>
<td>master air attack plan</td>
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<td>MAG</td>
<td>maritime assessment group</td>
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<td>maritime air operations cell</td>
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<td>MARLO</td>
<td>Marine liaison officer</td>
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<td>MASINT</td>
<td>measurement and signature intelligence</td>
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<td>MAT</td>
<td>maritime assessment team</td>
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<td>MCP</td>
<td>maritime coordination plan</td>
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<td>MCWG</td>
<td>maritime collection working group</td>
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<td>MDA</td>
<td>maritime domain awareness</td>
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<td>MDT</td>
<td>maritime dynamic targeting</td>
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<td>MECB</td>
<td>maritime effects coordination board</td>
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<td>METOC</td>
<td>meteorological and oceanographic</td>
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<td>MIDB</td>
<td>modernized integrated database</td>
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<td>MILDEC</td>
<td>military deception</td>
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<td>MIOC</td>
<td>maritime intelligence operations center</td>
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<td>MISO</td>
<td>military information support operations</td>
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<td>MISREP</td>
<td>mission report</td>
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<td>MIW</td>
<td>mine warfare</td>
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<td>maritime operations center</td>
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<td>MOE</td>
<td>measure of effectiveness</td>
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<td>MOP</td>
<td>measure of performance</td>
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<td>MPG</td>
<td>maritime planning group</td>
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<tr>
<td>MPTL</td>
<td>maritime prioritized target list</td>
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</table>

**Note:** The abbreviations and their meanings are extracted from the provided dictionary page.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>MSC</td>
<td>Military Sealift Command</td>
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<tr>
<td>MSR</td>
<td>maritime support request</td>
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<td>MSTP</td>
<td>Marine Air-Ground Task Force Staff Training Program</td>
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<td>MTCB</td>
<td>maritime targeting coordination board</td>
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<td>MTN</td>
<td>multi-tactical data link network</td>
</tr>
<tr>
<td>MTNL</td>
<td>maritime target nomination list</td>
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<td>MTWG</td>
<td>maritime targeting working group</td>
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<td>Personnel</td>
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<td>Intelligence Directorate</td>
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<td>Operations Directorate</td>
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<td>Plans Directorate</td>
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<td>Communications and Information Systems Directorate</td>
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<td>N8</td>
<td>Comptroller</td>
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<td>N39</td>
<td>Information Operations</td>
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<td>naval and amphibious liaison element</td>
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<td>NAMDC</td>
<td>Navy Air and Missile Defense Command</td>
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<td>NAVFAC</td>
<td>Naval Facilities Engineering Command</td>
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<td>Naval Supply Systems Command</td>
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<td>Navy component commander</td>
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<td>NCCC</td>
<td>Navy Communications System Coordination Center</td>
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<td>NCIS</td>
<td>Naval Criminal Investigative Service</td>
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<td>numbered fleet commander</td>
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<td>NGO</td>
<td>nongovernmental organization</td>
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<td>NNWC</td>
<td>Naval Network Warfare Command</td>
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<td>NPP</td>
<td>Navy planning process</td>
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<td>Acronym</td>
<td>Description</td>
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<tr>
<td>NSL</td>
<td>no-strike list</td>
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<tr>
<td>NTTP</td>
<td>Navy tactics, techniques, and procedures</td>
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<tr>
<td>OGA</td>
<td>other government agency</td>
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<td>ONI</td>
<td>Office of Naval Intelligence</td>
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<td>OO</td>
<td>operational objective</td>
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<td>OPCON</td>
<td>operational control</td>
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<td>OPLAN</td>
<td>operation plan</td>
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<td>OPNAV</td>
<td>Office of the Chief of Naval Operations</td>
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<td>OPORD</td>
<td>operation order</td>
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<td>operations</td>
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<td>OPSEC</td>
<td>operations security</td>
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<td>operational planning team</td>
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<tr>
<td>OPTASK</td>
<td>operation task</td>
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<td>OPTASK COMM</td>
<td>operational tasking communication</td>
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<td>public affairs</td>
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<td>PAO</td>
<td>public affairs officer</td>
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<tr>
<td>PDMA</td>
<td>plan-direct-monitor-assess</td>
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<td>PI</td>
<td>purposeful interference</td>
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<td>PIR</td>
<td>priority intelligence requirement</td>
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<td>POC</td>
<td>point of contact</td>
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<td>political advisor</td>
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<td>preplanned response</td>
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<td>personnel recovery</td>
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<td>personnel recovery coordination cell</td>
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<td>protection working group</td>
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<td>regional air defense commander</td>
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<td>RC</td>
<td>Reserve Component</td>
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<td>RFC</td>
<td>request for capabilities</td>
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</table>
RFF  request for forces
RFI  request for information
RM  religious ministry
RMSA  regional maritime situational awareness
ROE  rules of engagement
ROMO  range of military operations
RSOI  reception, staging, onward movement, and integration
RTL  restricted target list
RUF  rules for the use of force
SA  situational awareness
SADC  sector air defense commander
SAR  search and rescue
SATCOM  satellite communications
SEP  special effects package
SIGINT  signals intelligence
SIO  senior intelligence officer
SITREP  situation report
SJA  staff judge advocate
SME  subject matter expert
SOF  special operations forces
SOLE  special operations liaison element
SOP  standard operating procedure
SPINS  special instructions
SUW  surface warfare
TACAIR  tactical air
TACON  tactical control
TBMCS  Theater Battle Management Core System
TCP  theater campaign plan
<table>
<thead>
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<th>Abbreviation</th>
<th>Description</th>
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<td>TCPED</td>
<td>tasking, collection, processing, exploitation, and dissemination</td>
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<td>TDL</td>
<td>tactical data link</td>
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<tr>
<td>TDN</td>
<td>target development nomination</td>
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<td>targeting effects team</td>
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<td>TF</td>
<td>task force</td>
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<td>TIPC</td>
<td>target intelligence planning committee</td>
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<td>TLAM</td>
<td>Tomahawk land-attack missile</td>
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<td>TO</td>
<td>tactical objective</td>
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<tr>
<td>TPFDD</td>
<td>time-phased force and deployment data</td>
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<td>TPFDL</td>
<td>time-phased force and deployment list</td>
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<td>TSC</td>
<td>theater security plan</td>
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<td>theater security cooperation plan</td>
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<td>TSMPC</td>
<td>Tomahawk land-attack missile strike and mission planning cell</td>
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<td>time-sensitive target</td>
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<td>tactics, techniques, and procedures</td>
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<td>universal naval task list</td>
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<td>United States Army</td>
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