

# Maritime Staff Reference Guide

# Maritime Staff Operators Course

College of Maritime Operational Warfare  
January 2024



U.S. NAVAL WAR COLLEGE  
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The faculty of the Maritime Staff Operators Course (MSOC) is pleased to produce this guide for the use of staff operators throughout the Navy. We hope you find it handy and easy to use. Please understand, however, that this is only a guidebook. Use it in conjunction with other joint and Navy doctrine publications. We welcome feedback on its content or suggestions for improvement. Feel free to contact us at [cmow\\_msoc\\_faculty@usnwc.edu](mailto:cmow_msoc_faculty@usnwc.edu).

General information on CMOW courses can be found at: <https://usnwc.edu/college-of-maritime-operational-warfare/Core-Curriculum>

Useful websites for downloading publications:

**Joint Doctrine:**

Joint Electronic Library (JEL): <https://www.jcs.mil/Doctrine>  
JEL + Joint Doctrine, Education and Training Electronic Information System (JDEIS):

Unclassified: <https://jdeis.js.mil/jdeis/generic.jsp>

Classified: <http://jdeis.js.smil.mil/jdeis>

**Navy Doctrine (CAC registration via .mil account required):**

<https://doctrine.navy.mil/default.aspx>

**Multi-Service Doctrine:** <http://www.alsa.mil/>

**DOD Issuances (Directives, Instructions, and Manuals):**

<https://www.esd.whs.mil/DD/>

**Navy Issuances:** <https://www.secnav.navy.mil/doni/default.aspx>

**DOD, Multinational/Coalition/NGO Collaboration:**

<https://www.apan.org/>

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## Naval Warfare

Maritime forces support joint campaigns, operations, and activities across the competition continuum by shaping the operational environment, providing flexible response and deterrence options, preventing conflict, resolving crises, and prevailing in fleet warfare. The naval services do this by establishing, maintaining, or executing five enduring naval functions—sea control, power projection, deterrence, maritime security, and sealift—to achieve freedom of action in the maritime domain.

- **Sea Control**. Sea control is the freedom of action to use the sea for specific purposes in specified areas and for specified periods of time and, where necessary, to deny its use to the enemy.
- **Power Projection**. Power projection is the ability to deter, coerce, and inflict costs on adversaries and enemies from the maritime domain to the degree of our choosing with strike, amphibious, and naval special warfare capabilities.
- **Deterrence**. Deterrence is the prevention of action by the existence of a credible threat of unacceptable counteraction or belief that the cost of action outweighs the perceived benefits.
- **Maritime Security**. Maritime security includes operations to protect maritime sovereignty and resources and to counter maritime-related terrorism; proliferation of conventional weapons and weapons of mass destruction; transnational crime, piracy, or other threat networks; environmental destruction; illegal, unreported, and unregulated fishing; and illegal seaborne migration.
- **Sealift**. Sealift consists of the afloat pre-positioning and ocean movement of military materiel in support of United States and multinational forces.

### CONCEPTS OF NAVAL WARFARE

- **Sea Control**: The Navy doctrinal definition of sea control is different than the Joint doctrinal definition listed above. Per NWP 5-01, sea control is not an aspect of peacetime power projection. Naval forces ***obtain sea control through combat or the immediate threat of combat*** and the United States Navy's forward presence in itself is insufficient to achieve sea control.
- **Additional considerations of sea control**.
  - Sea control includes the airspace above the surface and the water volume and seabed below.
  - When sea control is established, sea denial is an inherent subset.

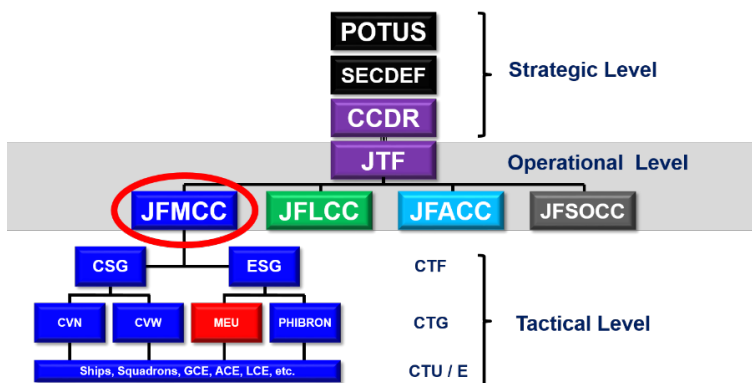
- Sea control enables all other naval functions—power projection, deterrence, maritime security, and sealift.
- Degrees of Sea Control:
  - **General:** Complete freedom to use the sea for friendly purposes.
  - **Local:** Superiority in an operationally significant part of the sea.
  - **Permanent:** Stronger side dominates JOA; enemy unable to interfere with friendly operations.
  - **Temporary:** Neither side is able to be decisive.
  - **Absolute:** One fleet can operate without major opposition while the other fleet cannot operate.
  - **Limited:** One side has freedom of action; other side operates at high risk.
  - **Contested:** Opposing sides possess roughly equal capabilities.
- **Sea Denial:** Partially or completely denying adversaries the use of the sea in specified areas. Sea denial is exercised when a force prevents an adversary from controlling a maritime area without being able to control that area itself.
  - Sea denial is an offensive, cost-imposing approach can be applied when it is impossible or unnecessary to establish sea control.
  - Methods of Sea Denial.
    - Offensive or defensive mining.
    - Chokepoint control.
      - Control of critical passages.
      - Control of shore of a strait/narrows.
    - Counter-blockade.
    - Coastal defense.
    - Operational deception.
- **Sea Control Operations:** Sea control operations involve actions to locate; identify; target; and restrict, deter, or deny actions of enemy forces across all domains that could inhibit friendly force freedom of action throughout the maritime domain.

- Sea control operations include:
  - Destruction of enemy naval forces.
  - Protection of vital sea lanes.
  - Establishment of local air and maritime superiority in the maritime area of operations.
- **Maritime Superiority:** That degree of dominance of one force over another that permits the conduct of maritime operations by the former and its related land, maritime, and air forces at a given time and place without prohibitive interference by the opposing force.
- Maritime Superiority is a means to an end, not the end itself.

## FREEDOM OF NAVIGATION AND MARITIME INTERCEPTION OPERATIONS

Term	Definition
Freedom of Navigation	A principle of customary international law that, apart from the exceptions provided for in international law, ships flying the flag of any sovereign state shall not suffer interference from other states.
Freedom of Navigation Operations	Operations conducted to protect US navigation, overflight and related interests on, under and over the seas.
<b>MIO</b> (Maritime Interception <i>for Interdiction</i> —NATO term] Operations)	Efforts to monitor, query, and board merchant vessels outside of territorial waters to enforce sanctions against other nations such as those in support of United Nations Security Council resolutions.
<b>EMIO</b> (Expanded – Maritime Interception Operations)	Broadened maritime interception operations to intercept targeted personnel or material that pose an imminent threat to the United States.
<b>MCPI</b> (Maritime Counter Proliferation Operations)	Authorized by the Secretary of Defense, MCPI is the maritime effort to combat the proliferation of WMD; including nuclear, biological, and chemical weapons, their delivery systems, and related material – distinction here is that the material is not weaponized... it does not pose an immediate threat.

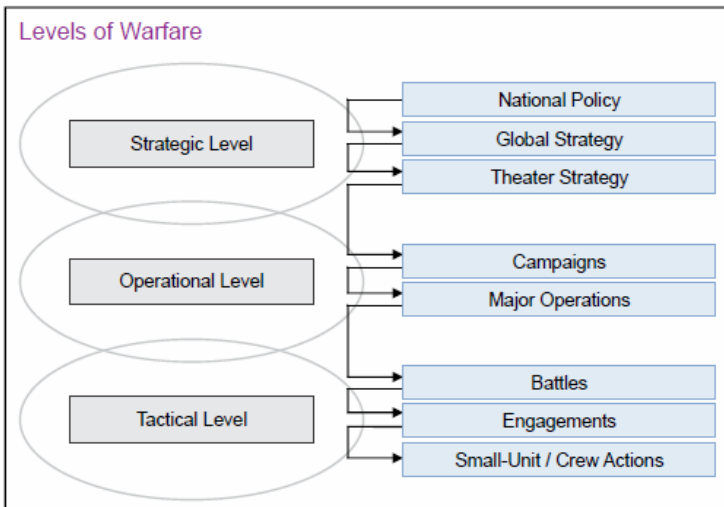
## Levels of Warfare



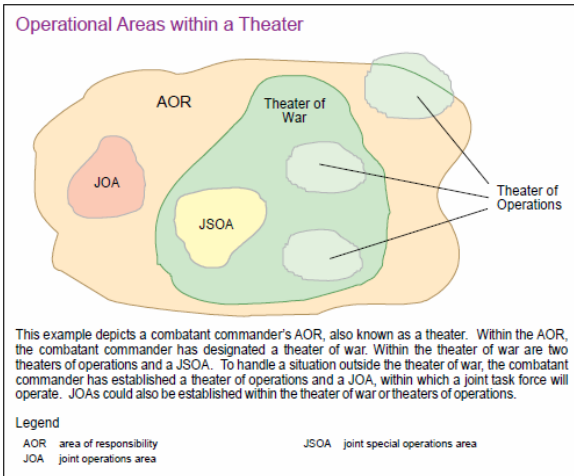
- **Strategic Level.** Strategy is an idea or set of ideas for employing the instruments of national power in a coordinated and integrated fashion to achieve strategic objectives.
  - The strategic level of warfare integrates national policy decisions into the development and promulgation of national security strategy, national defense strategy, and national military strategy.
  - At the strategic level, a nation often determines the national (or multinational, in an alliance or coalition) guidance that addresses strategic objectives and then develops and uses the instruments of national power to achieve them.
  - The President, aided by the National Security Council, establishes policy and national strategic objectives.
  - Secretary of Defense translates guidance into strategic military objectives.
  - Secretary of Defense guidance facilitates identification of the global and theater strategic planning requirements.
  - Normally, Combatant Commanders communicate through the CJCS during strategic discussions with the President and Secretary of Defense.
- **Operational Level.** The operational level of warfare is generally the realm of Combatant Commanders and their subordinate components
  - The focus of this level is the application of operational art.



- Combatant Commanders link strategy and tactics through campaigns (e.g., global campaign plans [GCPs] and combatant command campaign plans [CCPs]); link the operational and strategic objectives for each type of plan; and work to constantly pursue and support national, multinational, or global strategic objectives as defined by the President and Secretary of Defense.
- Additionally, specific to warfighting, there may be multiple campaigns, each consisting of a series of operations with their own specific operational level objectives.
- **Tactical Level.** The tactical level of warfare is where the conduct of battles and engagements seeks to achieve military objectives assigned to subordinate units.
  - Activities at this level focus on creating combat power and achieving the superiority required to achieve combat objectives.
  - An engagement can include a wide variety of activities between opposing forces, normally occurring in a short period of time and limited physical or virtual space.
  - A battle consists of a set of related engagements in time and space.
  - The results of one or more battles can affect the course of an operation, series of operations, or a larger campaign. At this level, commanders generally employ and arrange forces to achieve their military objectives.

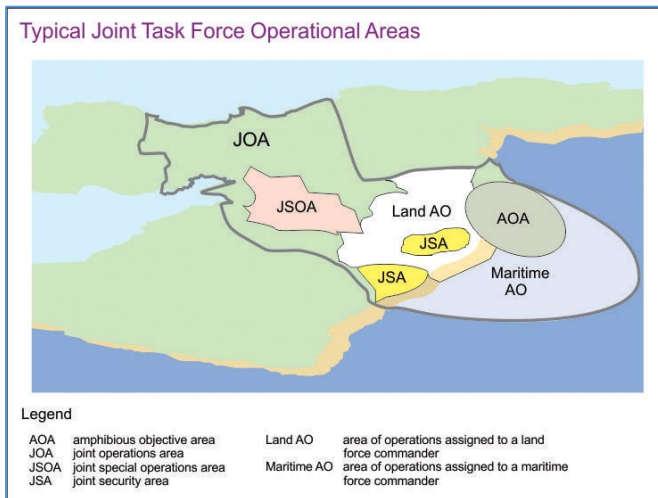


# Theater Organization and Structure



- **Operational Area (OA)**. An overarching term encompassing more descriptive terms (such as area of responsibility and joint operations area) of locations for the conduct of military operations.
- **Area of Responsibility (AOR)**: The geographical area associated with a combatant command within which the combatant commander has authority to plan and conduct operations.
- **Theater of War**: Defined by the President, Secretary of Defense, or the combatant commander as the area of air, land, and sea that is, or may become, directly involved in the conduct of campaigns and major operations involving combat.
  - The United States establishes a theater of war **when there is a formal declaration of war or it is necessary to encompass more than one theater of operations (or a JOA and a separate theater of operations) within a single boundary for C2, sustainment, protection, or mutual support.**
  - A theater of war may not encompass a Combatant Commander's entire AOR but may cross the boundaries of two or more AORs.
- **Theater of Operations (TOO)**: An operational area defined by the combatant commander for the conduct or support of specific military operations.
  - A theater of operations is established primarily when the scope and scale of the operation or campaign exceeds what a Joint Operations Area can normally accommodate.

- More than one joint force HQ can exist in a theater of operations.
- A Combatant Commander may establish one or more theaters of operations where different theaters will normally focus on different missions.
- Theaters of operations are normally associated with campaigns and major operations and may cross the boundary of two or more AORs.



- **Joint Operations Area (JOA):** The airspace, land area, and maritime area defined by a combatant commander or subordinate unified commander, in which a joint force commander directs military operations to accomplish a specific mission.
  - JOAs are particularly useful when operations have a limited scope and geographic area or when operations cross the boundaries of AORs or cover geography between two theaters.
- **Joint Special Operations Area (JSOA):** An area of land, sea, and/or airspace assigned by a JFC to the Commander of a joint special operations force to conduct special operations activities.
- **Amphibious Objective Area (AOA):** A geographical area of sufficient size for conducting necessary sea, air, and land operations, and within which is located the objective(s) to be secured by the amphibious force.

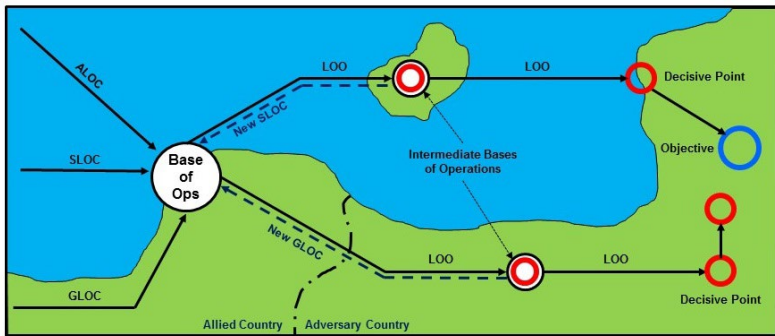
- **Area of Operations (AO):** An ***operational area defined by a Commander for land and maritime forces*** that should be large enough to accomplish their missions and protect their forces.
  - Component commanders with AOs typically designate subordinate AOs within which their subordinate forces operate
- **Joint Security Area (JSA):** A specific area to facilitate protection of joint bases and their connecting lines of communications that support joint operations.
- **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 that could jeopardize the accomplishment of the mission. It encompasses adjacent geographic areas where political/military/economic developments have an effect within a JOA.
- **Area of influence:** A geographical area wherein a Commander is directly capable of influencing operations by maneuver or fire support systems normally under the Commander's command or control.

**THEATER GEOMETRY:** The main elements of any theater are positions, distances, bases of operation, physical objectives, decisive points, lines of operations, lines of retreat/withdrawal, and lines of communication

- **Positions:** Any theater contains a number of militarily important geographic positions that are, or could be, used for offensive or defensive employment of one's forces. However, to have a military value, such a position must be complemented by a corresponding effective force. Also, the value of a position is not in the position itself, but in the use that is made of it.
  - **Central Position / Interior Lines**
    - A force operates on interior lines when its operations *diverge from a central point.*
    - Interior lines usually represent *central position where a force can reinforce or concentrate its elements faster than the enemy force can reposition.*
    - A force within a central position is closer to separate enemy forces than the enemy forces are to one another.
    - A central position enables a force to mass combat power against a specific portion of an enemy force by shifting capabilities more rapidly than the enemy can react.
  - **Exterior Position / Exterior Lines**

- A force operates on exterior lines when its operations converge on the enemy.
- An exterior position may offer opportunities to encircle and annihilate an enemy force.
- Operating on exterior lines typically requires a force stronger or more mobile than the enemy.
- **The relevance of interior and exterior lines *depends on the time and distance relationship between* the opposing forces.**
  - **Although an enemy force may have interior lines with respect to the friendly force, this *advantage disappears if the friendly force is more agile and operates at a higher tempo.***
  - **Conversely, if a *smaller friendly force maneuvers to a position between larger but less agile enemy forces, the friendly force may be able to defeat them in detail before they can react effectively.***
- **Base of Operations.** A locality from which operations are projected or supported.
  - Contains installations which provide logistics or other support.
  - Encompasses a land or coastal area where forces are assembled and sustained.
  - Supports offensive and defensive operations.
  - Established so advantageous lines can be created relative to objectives
  - Intermediate base of operations can be developed or obtained during the course of a major operation
- **Objective.** The clearly defined, decisive, and attainable goal toward which an operation is directed.
- **Decisive Point.** Key terrain, 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.
- **Line of Operation (LOO).** A line that defines the interior or exterior orientation of the force in relation to the enemy or that connects actions on nodes and/or decisive points ***related in time and space to an objective(s).***
  - An imaginary line along which a force moves from its base of operations toward a given physical objective.

- **Line of Effort (LOE)**. In the context of planning, using the purpose (cause and effect) to focus efforts toward establishing operational and strategic conditions by linking multiple tasks and missions.
- **Line of Communications (LOC)**. A route (land, water, and/or air) that connects an operating military force with a base of operations and along which supplies and military forces move.
  - **All Lines of Communications require protection.**
  - **Ground Lines of Communications (GLOCs)**: Links between bases of operations and fielded forces; roads, railroads, waterways.
  - **Air Lines of Communications (ALOCs)**: Used extensively for fast transport of troops and specialized cargo.
  - **Sea Lines of Communications (SLOCs)**: Routes used for commercial trade and transporting troops/materiel.



## **Maritime Operations Center (MOC)**

The Maritime Operations Center (MOC) is an organizational construct that supports accomplishment of all the command's missions, during competition, conflict, and contingency or combat operations. To support this there are two complimentary structures, **N-codes** (staff directorates) and **MOC**, that co-exist and mutually support each other in enabling the fleet Commander and staff to carry out missions, functions, and tasks that span the range of responsibilities as a Navy component/fleet and/or Maritime Component Commander.

**N-code structure:** The traditional N-code structure that organizes by directorate (e.g., N1 (administration), N2 (intelligence), N3 (operations), N4 (logistics), N5 (plans), N6 (communications)) serves the Navy well in carrying out fleet

management responsibilities. However, the N-code structure's stovepipes do not easily facilitate the crosstalk needed to support operations to employ the force.

**MOC structure:** Since the MOCs are not independently resourced, the staff directorates supply the manpower and other resources for the MOC. The MOC is organized by teams/organizations comprised of functional teams and cross-functional teams. The primary functions of the MOC are to:

- Enable the commander's ability to command and control assigned forces by supporting an operational decision-making process within the HQ,
- Plan and coordinate operations with superior, supported, peer, subordinate and supporting commands to set the conditions for subordinates' success.

The MOC therefore leverages the manpower, systems, information resources, and expertise provided by the staff directorates to organize and operate in two main layers: functional teams and cross-functional teams.

**Functional Teams:** The first layer is persistent and is organized into functional teams. Functional teams (FTs) include predefined centers and cells, e.g., Pers/Admin Center, 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), Intel OPS Cell, Targeting Cell, Fires Cell, etc. The centers and cells are where MOC personnel with the same functional skill sets sit and work on a day-to-day basis (i.e., a "Navy work center"). The centers often have continuously manned watch floors, and the N-codes also serve as the "parent" organizations for the centers for resourcing and administration. This differs slightly from an N-code. People are assigned to an N-code directorate, but the N-directorate organization supports Fleet Management missions and functions.

**Cross-Functional Teams:** The second layer of MOC organization are cross-functional teams (CFTs), which have representatives from across the staff and different N-codes. CFTs are comprised of Operational Planning Teams, working groups and decision boards, e.g., Commander's Assessment Board, Commander's Decision Board, Target/Effects Coordination Board, Collection Management Board, Assessment Working Group, Collection Management Working Group, ROE Working Group, Fires/Targeting Working Group, etc. While a core set of CFTs will likely be permanently established within a MOC, the MOC's CFT structure, organization, and staffing may vary depending on the missions and operational environment. Other CFTs are stood up on an as-needed basis based on fleet missions and provide the cross-functional, collaborative work needed to support the Commander's decision cycle by producing requirements-based, mission-oriented outputs. CFT members can be present physically or virtually and may include members from mission partners up, down, and across the force.

## Planning Horizons.

### **Future Plans (FuPlans) / Far Term Horizon**

- Operational focus is on “**What’s Next.**”
- Next phase of operations or Sequels.
- Plans/Coordinates Maritime Theater Security Cooperation (TSC)
- Campaign/major operation plans, OPLANs / CONPLANs

### **Future Operations (FOPS) / Mid Term Horizon**

- Operational focus is on “**What If**”
- Contingency / Branch Planning.
- Refines Future Plans’ conceptual plans with detailed planning.
- Uses the same planning process (NPP) as the Future Plans Cell
- OPORDERs / FRAGORDERs



**Current Operations (COPS) / Near Term Horizon**

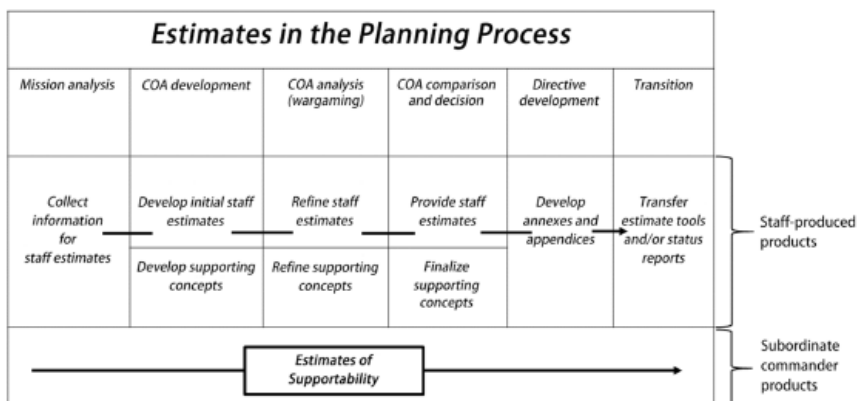
- Operational focus is on **“What Is”**
- Coordinate and monitor execution of current directives
- Maintain Common Operating Picture / force situational awareness
- Track CCIRs - immediately report relevant information to the Commander and offer options so the Commander can make decisions
- Coordinate operations with HHQ, adjacent component and subordinate staffs
- Conduit for information exchange/flow both internally and externally
- Products: Orders, Daily Intentions Message, Commander’s Update Brief (CUB)
- Directs Execution (FRAGORDER)

**SEVEN MINUTE DRILL** - 7-minute drills are used to establish the purpose of each event in the Battle Rhythm and provides a means to vet the need for the event.

Name of the BR Event	
Chair: (if event is a meeting.)	Point of contact: (Person responsible for agenda/event support.)
Purpose: (This section delineates the purpose of the event and serves as a main point of justification for the event to be established and reflected on the BR.)	
Inputs: (Specifies what operational information is required by the meeting to include specific out puts from other BR events.)	Outputs: (Specified what is produced as a result of this event.)
Meeting date and recurrence: (Specifies if the event occurs daily, weekly, or on some other recurring basis. Preferred meeting date should be listed on the standing seven-minute drill for a CFT; actual meeting dates and times should be listed in the version of the drill for an actual operational event/exercise.)	
Meeting venue/requirements: (Meeting venue requirements should be listed to enable the developer of the BR schedule to deconflict use of the command’s meeting and video teleconferencing (VTC) facilities. For an actual event, the location of the meeting should be listed.)	
Composition: (List required and optional membership of the event; position listed should be reflected in terms of which functional group is needed; e.g., logistics planner, COPS Surface Warfare expert.)	

## Staff Estimates

- **Staff estimate:** a detailed evaluation of how factors in a staff section's functional area or subordinate commander's warfare area affect the mission.
- Developed and continuously refined throughout planning and execution to ensure that COAs and current operations are supportable and sustainable.
- Submitted by N-Codes, special staff, or as directed to assist the commander's decisions and may be presented as text documents, graphics or oral presentations. Their form depends on the time available, command standard operating procedures (SOPs), and the level of command.
- Ultimately form the basis for annexes and appendices of orders and plans.



### Sample Staff Estimates Matrix

NPP Step/Staff Estimate Step	NPP Step Inputs	OPT Focus	Staff Section Focus from a staff functional area perspective
<b>Upon receipt of mission (not an NPP step)</b> Begin recording information	CDR has directed planning and OPT forming	Prepare for planning by conducting a quick initial assessment	Conduct initial assessment of staff functional areas. Determine planning requirements/timeline. Identify OPT members. Collect relevant functional area references/existing information. Make recommendations on immediate response actions.

<p><b>Mission Analysis</b> Initial Staff Estimate Para 1 Mission and Considerations</p>	<p>CDR's initial planning guidance HHQ Directives Existing staff estimates Existing intel or other section estimates OPT direction</p>	<p>Define the problem and mission by developing an understanding of mission, environment, terrain, friendly and enemy forces, neutrals, and time</p>	<p>Analyze HHQ mission from a staff area perspective. Determine known facts, current status and conditions of friendly (and neutral) forces. Describe the situation – environment and threat capabilities and vulnerabilities. Identify staff area specified and implied tasks. Conduct an initial functional area force structure analysis. Conduct an initial functional area risk assessment. Develop assumptions to missing or unknown facts. Develop a functional area mission statement essential tasks and purpose. Submit requests for information (RFIs) as required.</p>
<p><b>COA Development</b> Concept of support for each COA. Para 3 COA Dev.</p>	<p>OPT has presented MA brief Approved mission statement Initial CDR's intent and planning guidance OPT has brainstormed possible COAs</p>	<p>Develop COAs that accomplish the mission within the CDR's guidance</p>	<p>Determine a functional area requirement for each COA; e.g., COA 1 has ____ fuel requirements. Determine friendly and enemy relative advantages in specific staff areas. Conduct initial tests for validity on all possible COAs. Describe possible concepts to gain an advantage in staff areas or mitigate risk. Develop potential evaluation criteria. Define staff area objectives and potential tasks for subordinates. Assist OPT in developing COA sketch and narrative. Assist in preparation of COA briefing with analysis and impact of specific areas.</p>
<p><b>COA Analysis</b> Refined Staff Estimates</p>	<p>Approved COAs Refined ECOAs</p>	<p>Evaluate the effectiveness of each friendly COA against</p>	<p>Contribute to developing critical events, decision points, and governing factors.</p>

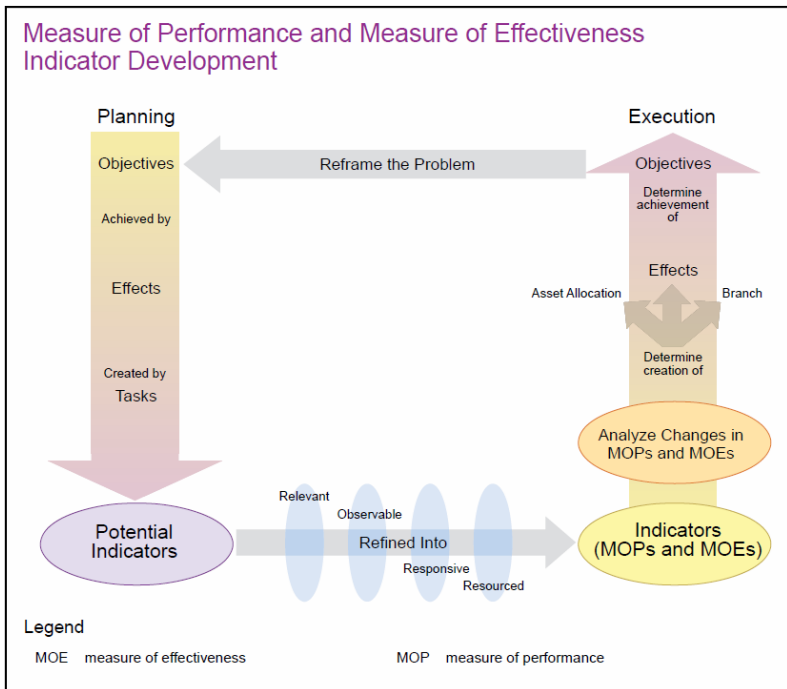
Para 4 COA Analysis, staff area	CDR's war gaming guidance Staff estimates paras 1-3	ECOAs using specified evaluation criteria	Capture key support and execution considerations including risk assessment, casualty projections, ISR requirements and limitations, projected locations, C2 system requirements, and METOC impacts. Staff members participate to cover responsibilities and area adequacy. Identify strengths and weaknesses of each support option. Integrate support requirements into potential branches and sequels. Update previous staff estimate paragraphs to reflect gained information.
<b>COA Comparison</b> Staff Estimates Para 5 COA Comparison	War gaming results Decision Support Matrix Refined estimates paras 1-4	Compare COAs to determine "best" COA	Contribute to determining functional evaluation criteria. Coordinate results with higher, adjacent, subordinate levels. List pros/cons for each COA. Make final tests for feasibility and acceptability per specific staff area. Provide recommendations for COA comparison.
<b>COA Decision and Approval</b> Para 6 Recommendations and Conclusions	CDR selects a COA	Select the most advantageous COA	Prepare new estimate reflecting the selected COA. Assist in completing the synchronization matrix. Assist in developing the concept of operations. Analyze risk and develop possible mitigation measures.
<b>Directive Development</b> Annexes and Appendices	OPT determines which annexes are required	Prepare and issue OPLAN/OPORD	Prepare specific annexes and input to base order/plan. If no order is being developed, update estimates.
<b>Transition</b> Running Estimates	Complete or partially complete OPLAN/OPORD	Shift from planning to execution	Participate in transition brief. Coordinate results with higher, adjacent and subordinate levels. Update staff estimates as required.

# Operation Assessment

## ASSESSMENT FUNDAMENTALS

Assessment is a continuous, Commander-centric analytical process to measure progress toward objectives. It is both art and science, and part of the Commander's decision cycle. Assessment is applicable at all levels of warfare and across the range of military operations.

- **Measure of effectiveness (MOE):** An indicator used to measure a current system state, with change indicated by comparing multiple observations over time.
- **Measure of performance (MOP):** An indicator used to measure a friendly action that is tied to measuring task accomplishment



## INDICATOR VALIDATION

- Indicators (MOEs and MOPs) should be:
  - **Relevant:** Selected indicators should provide useful insight into the evaluation of tasks, effects, and objectives

- **Observable:** Selected indicators should describe distinct quantitative or qualitative criteria
- **Responsive:** The collection and evaluation of indicators enables timely response by the staff and decisions by the Commander
- **Resourced:** Coordination for the collection of reporting requirements and information has been established

## **OPERATION ASSESSMENT IN PLANNING AND EXECUTION**

- Step 1: Develop an Assessment Plan
  - Organize for assessment planning
  - Receive IPOE/conduct systems analysis
  - Analyze objectives, effects, tasks, assumptions and risk
  - Develop Measures of Effectiveness (MOE) and Measures of Performance (MOP)
  - Develop a collection plan
  - Establish assessment responsibilities
  - Communicate the assessment plan
- Step 2: Collect Information and Intelligence
  - Collect MOPs
  - Collect MOEs
- Step 3: Analyze Information and Intelligence
  - Conduct Effects Assessment
  - Develop Assessment Recommendations
- Step 4: Communicate Feedback and Recommendations
- Step 5. Adapt Plans and Operations

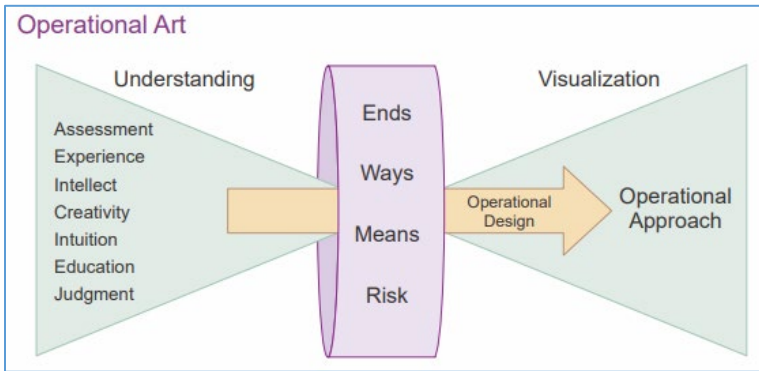
## **LINKING INDICATORS WITH OBJECTIVES, EFFECTS, AND TASKS**

There are different techniques that can be used to develop indicators. NWP 5-01 Appendix H and JP 5-0 chapter VI offer detailed methods for the development of assessment indicators (MOEs and MOPs). Assessment personnel must understand the objectives, effects and tasks outlined in the plan. Additionally, an understanding of the operational environment via IPOE, COG, and other systems analysis will provide insight into the required indicators.

The following information should be considered in the development and collection of assessment indicators:

- What are the historical baselines (patterns of life) of the indicators?
- What are the desired conditions and/or rates of change of the indicators?
- Who is collecting the indicators (source of information)?
- How frequently are the indicators collected?
- What format will the indicators be presented?

## Operational Art and Operational Design



### **OPERATIONAL ART**

Operational art is the cognitive approach by Commanders and staffs, supported by their skill, knowledge, experience, creativity, and judgment, to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, and means. The purpose of operational art is the pursuit of strategic objectives through arrangement of tactical activity in time, space, and purpose.

- Operational Art is how you fight at the Operational Level of War.
- Operational Art helps to order thoughts and understand conditions for success before seeking action.
- Operational Art links tactical actions to strategic objectives; without OPART, operations would be a series of disconnected actions.
- Develops **Ways** that allow the achievement of **Ends** using available **Means** with acceptable **Risk**.
- Synchronizes **Forces** in **Time** and **Space**.

### **Ends, Ways, Means, Risk**

**(Ends)** What are the military objectives that must be achieved, how are they related to the strategic objectives, and what objectives must be achieved to enable that strategic/national objective? How do those differ from the current conditions?

**(Ways)** What sequence of actions is most likely to achieve those objectives and military end state? How will I measure achievement of those objectives?

**(Means)** What resources are required to accomplish that sequence of actions?

**(Risk)** What is the likely chance of failure or unacceptable results in performing that sequence of actions? How will I identify if one or more of them occur? What is an acceptable level of "failure"?

## OPERATIONAL DESIGN

Operational design is the conception and construction of the framework that underpins a joint operation or campaign plan and its subsequent execution.

- Design is most useful when faced with a complex, ill-structured, or unfamiliar situation
- Design assists the commander and planners in visualizing the Operational Environment and the nature of the problem, and establish a framework to solve it.
- Design is normally conducted at the Combatant Commander and Joint Task Force Commander levels, as those are the levels of command normally facing complex, ill-structured, or unfamiliar situations. When a Maritime Component Commander is tasked to conduct an operation by higher authority, it is normally a well-structured, though complicated problem, and planners can immediately begin planning using the Navy Planning Process.
- A MOC may have to conduct design when directed to form a Joint Task Force headquarters, when presented with an unfamiliar problem, or when the commander directs.
- Joint Force Commanders use Operational Design Methodology to conduct design. This joint methodology has nine steps:
  - Understand the strategic direction.
  - Understand the strategic environment.
  - Understand the OE.
  - Define the problem.
  - Identify assumptions needed to continue.
  - Develop options (the operational approach).
  - Identify decisions and decision points (external).
  - Refine operational approach(es).
  - Develop planning and assessment guidance.
- Navy Commanders use Design Methodology as described in NWP 5-01. This Navy methodology has four steps:
  - Understand the Operational Direction
  - Understand the Operational Environment
  - Define the Problem
  - Develop the Operational Approach
- Outputs of design include:
  - Description of the Operational Environment
  - Definition of the problem to be solved
  - Description of the Operational Approach
  - Commander's Initial Intent

If a Maritime Component Commander receives these items from Higher Headquarters, there is no need to conduct design, and can review the design products for understanding, and then begin conducting the Navy Planning Process.



## Operational Factors

Commanders seek to balance operational factors in relation to their objectives in order to maintain freedom of action.

- Relative to the objective, the operational Commander must understand the operational factors individually, and the relationships between them.
- The Commander must make decisions about tradeoffs between factors to produce the best balance relative to the objective. For example, because time lost can't be regained, the Commander may decide to commit forces before they are completely ready, to use forces which do not fit well, or to give up space until such forces can be deployed. Alternatively, the Commander may have to alter the operational objective(s) to fit the balance of operational factors he/she can affect. Operational factors are best explained by presenting examples of each, rather than strict definitions.

### **TIME**

- The most critical factor—time lost can never be recovered
- Duration of conflict (logistics/sustainment)
- Preparation time
- Time for mobilization
- Planning time
- Training time
- Time for deployment
- Warning time (helped by geostrategic positioning)
- Reaction time (alert status)
- Time between consecutive major operations = tempo

### **SPACE**

- Shape and Distance: Critical aspects of space; affect power projection and logistics
- Elements of Space
  - Highly dynamic once hostilities start
  - Comprised of people, topography, oceanography, climate, infrastructure
  - Neutral zones can play a significant role in offense and defense
  - Maritime space: use, control, or deny
- Geostrategic Position
  - **Continental:** No border on ocean (e.g., Afghanistan, Hungary)
  - **Semi-continental:** On maritime rim of a continental landmass (e.g., Germany)
  - **Peninsular:** Longer sea than land frontier (e.g., Italy, Korea)
  - **Insular:** Large island (e.g., UK)
  - **Archipelagic:** Many islands (e.g., Philippines, Indonesia)

### **FORCE**

- Physical Elements (tangible)

- Military size/type/mix, combat power, reserves, logistics, mobility, weapons
- Human Elements (intangible)
  - Morale, discipline, leadership, unit cohesion, training, jointness, doctrine

## **TIME, SPACE AND FORCE INTERRELATIONSHIPS**

- Time-Space
  - Time and space are not subject to the Commander's will
  - Physical and climatological characteristics of space impact deployment and employment
- Time-Force
  - Timely availability of forces based on type/size of forces and their organization, distance to JOA, transportation mode, and infrastructure
- Space-Force
  - Overcoming space in movement of forces
  - Controlling space requires forces
  - Size of force in proportion to the space
- Time-Space-Force
  - The most complex relationship to assess—the essence of OPART
  - Greater distance to move forces requires more time

## **Principles of Joint Operations**

- **Mass:** The intent of massing forces or effects is to concentrate combat power at the most advantageous place and time to produce results.
- **Objective:** Specifying the objective is to direct and prioritize military action toward a clearly defined and achievable goal.
- **Offensive:** The purpose of an offensive action is to seize, retain, and exploit the initiative.
- **Security:** Security prevents the enemy from acquiring an unexpected advantage.
- **Economy of Force:** An economy of force expends minimum-essential combat power (lethal and nonlethal) on secondary efforts to allocate the maximum possible combat power on primary efforts.
- **Maneuver:** The purpose of maneuver is to place an adversary or enemy in a position of disadvantage.

- **Unity of Command:** The purpose of unity of command is to ensure unity of effort under one responsible commander for every objective.
- **Surprise:** The principle of surprise is to strike at a time or place where the enemy is unprepared.
- **Simplicity:** The purpose of simplicity is to increase the probability of success in execution by preparing clear, uncomplicated plans and concise orders.
- **Restraint:** The principle of restraint is to use only the amount of force necessary to influence the adversary.
- **Resilience:** The quality of resilience enables forces to recover from loss or setback.
- **Legitimacy:** The perception of legitimacy maintains legal and moral authority at both the national and international levels.

## Joint / Operational Functions

**Joint / Operational Functions:** Operational Functions are interrelated capabilities and activities that allow the Commander to synchronize, integrate, and direct military actions across the full range of operations. The functions include: Command and Control, Intelligence, Movement and Maneuver, Fires, Sustainment, and Protection. The effective application of the operational functions, in concert with one another, facilitates the planning and conduct of naval operations. **(Note: Joint doctrine includes Information as an independent function).**

### **OPERATIONAL COMMAND AND CONTROL**

**Global Force Management:** Global Force Management is a series of processes that weigh the Services' capacity to generate forces against CCDR requirements. The assignment and allocation processes provide Secretary of Defense the command and control mechanisms to distribute forces to combatant commanders.

- **Directed Readiness:** Secretary of Defense direction to the Services to generate a quantity of ready and available forces to execute the National Defense Strategy and make the forces available to the joint force for a contingency.
- **Assigned Forces** - Forces are typically assigned when their organizational placement is relatively permanent. Forces are assigned by the Secretary of Defense to meet Unified Command Plan missions and responsibilities. **Combatant Commanders exercise Combatant Command (Command Authority) over assigned forces.**
- **Allocation of Forces** - The temporary transfer of forces to meet the operational demand of combatant commanders, including rotational requirements and requests for capabilities or forces (unit or individual) in response to crisis or emergent contingencies. **The SecDef authorizes**

***the transfer of forces between Combatant Commanders / Service Retained Forces.***

- **Attached Forces** - Forces are attached when their organizational placement is relatively temporary (e.g., rotational forces). ***Gaining Combatant Commanders exercise Operational or Tactical Control over attached Forces.*** (The command relationship will be provided in deployment orders).
- **Transfer of Forces** - Forces, not command relationships, are transferred between commands. When forces are transferred, the command relationship the gaining commander will exercise (and the losing commander will relinquish) over those forces must be specified.
- **Apportioned Forces** - The quantities of force capabilities and resources provided ***for planning purposes only***, but ***not necessarily an identification of the actual forces that may be allocated for use when a plan transitions to execution.***

**Command and Control**

- **Command** - The authority that a commander in the armed forces lawfully exercises over subordinates by virtue of rank or assignment.
- **Command and Control** - The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission.

**Unity of Command and Unity of Effort.**

- **Unity of Command** - The direction of all forces under a single, responsible commander who has the requisite authority to direct and employ those forces.
- **Unity of Effort** - Coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization that is the product of successful unified action.

**Command and Control Tenets**

- **Clearly defined authorities, roles, and relationships** - It is essential for the commander to ensure subordinate commanders understand their authorities, role in decision making, and relationships with others.
- **Mission command** - The conduct of military operations through decentralized execution based upon mission-type orders. Commanders issue mission-type orders focused on the purpose of the operation rather than on the details of how to perform the assigned tasks.

- Information management and knowledge sharing - Control and appropriate sharing of information.
- Communications
  - Commander's intent - The commander's intent represents a unifying idea that enables decentralized execution within centralized, overarching guidance. It should include a clear and concise expression of the purpose of an operation and the desired objectives and military end state
  - Mission type orders - Mission-type orders direct a subordinate unit to perform a certain task without specifying how to accomplish it.
- Timely decision making - The commander who can gather and synthesize information and use that knowledge to make better decisions faster generates a rapid tempo of operations and gains a decided advantage
- Coordination mechanisms - Coordination mechanisms facilitate integration, synchronization, and synergistic interaction. Coordinating mechanisms can include: agreements, memoranda of understanding, exchange and liaison officers, direct and integrated staffing, interoperable communications systems, information sharing, control measures (maneuver control measures, fire support coordination measures, and airspace coordinating measures), exercises, and plan development.
- Battle rhythm discipline - A command headquarters' battle rhythm is its daily operations cycle for briefings, meetings, and reporting requirements. A battle rhythm is essential to support decision making, staff actions, and higher headquarters information requirements and to manage the dissemination of decisions and information in a coordinated manner.

**Organizing for Command and Control** - The command and control structure is centered on the mission and Concept of Operations, available forces and capabilities, and the staff composition, capabilities, location, and facilities. The command should be guided in this effort by the following principles:

- Simplicity - Unambiguous chain of command, well-defined command relationships, and clear delineation of responsibilities and authorities,
- Span of Control - Span of control refers to the number of subordinate units under a single commander. Span of control is based on many factors, including the number of subordinates, number of activities, range of weapon systems, force capabilities, size and complexity of the operational area, and method used to control operations (centralized or decentralized). Allocating subordinate commanders more units gives them greater flexibility and increases options and combinations.

However, increasing the number of subordinate units increases the number of decisions commanders have to make and slows reaction time among decisionmakers.

- **Unit Integrity** – Forces should remain organized as designed and in the manner accustomed through training to maximize effectiveness. However, if a commander desires to reorganize those forces, it should be done only after careful consultation and coordination with the Service component commander and the impacts to those forces if reorganized.
- **Interoperability** - The forces, units, and systems must operate together effectively. Interoperability includes joint force development, use of joint doctrine, the development and use of joint plans and orders, and the development and use of joint and interoperable communications and information systems.

**Levels of Authority.** The specific command relationship (COCOM, OPCON, TACON, and support) defines the authority a commander has over assigned or attached forces. ***With the exception of COCOM, superior commanders have the discretion to delegate all or some of the authorities inherent in the specified command relationship.***

**Command Relationships** (the following is a summary of the authorities associated with the four types of command and control relationships, see Joint Publication 1 Volume 2 for details):

- **Combatant Command (Command Authority) COCOM - COCOM over assigned forces** (those forces assigned by SecDef) is vested only in the commanders of CCMDs, and cannot be delegated or transferred.
- **Operational Control (OPCON)** - 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 over all aspects of military operations and joint training necessary to accomplish the mission. ***Key elements of OPCON includes the authority to:***
  - Exercise or delegate OPCON and TACON or other specific elements of authority.
  - Establish support relationships among subordinates, and designate coordinating authorities.
  - Prescribe the chain of command to the commands and forces within the command.
  - ***Organize subordinate commands and forces within the command as necessary to carry out missions assigned to the command while giving due consideration for unique Service organizational structures and their specific support requirements.***

- **Tactical Control (TACON)** - TACON is an 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 and maneuvers within the operational area necessary to accomplish assigned missions or tasks assigned by the commander exercising OPCON of the attached force.*** Key elements of TACON includes the authority to:
  - Give direction for military operations.
  - Control designated forces (e.g., ground forces, aircraft sorties, or missile launches).
  - ***TACON does not provide the authority to add to or change the function of the subordinate commander.***
- **Supported/supporting** - Support is a command authority. A support relationship established by a common superior commander between subordinate commanders when ***one organization should aid, protect, complement, or sustain another force.*** Key elements of a supported / supporting command relationship include:
  - The establishing authority is responsible for ensuring both the supported commander and supporting commanders understand the degree of authority granted to the supported commander.
  - The supported commander should ensure that the supporting commanders understand the assistance required.
  - The supporting commanders provide the assistance needed, subject to existing capabilities and other assigned tasks.
  - Support may be exercised in both the administrative and operational branches of the chain of command.
  - When a supporting commander cannot fulfill the needs of the supported commander, either the supported commander or a supporting commander notifies the establishing authority. The establishing authority is responsible for determining a solution.
  - When establishing supported/supporting relationships, the commander should issue an establishing directive, which is an order issued by the common commander to specify the purpose of the support relationship. It should specify the purpose of the support command relationship, the effect desired, the scope of action to be taken, and any shifts in the support relationship.

### ***Types of Support***

**General Support:** Support given to the supported force as a whole and not to any particular subdivision thereof.

**Mutual Support:** That support which units render each other against an enemy, because of their assigned tasks, their position relative to each other and to the enemy, and their inherent capabilities.

**Direct Support:** A mission requiring a force to support another specific force and authorizing it to answer directly to the supported force's request for assistance.

**Close Support:** The action of the supporting force against targets or objectives that are sufficiently near the supported force as to require detailed integration or coordination of the supporting action.

### **Other Authorities**

- **Administrative Control (ADCON)** – Direction or exercise of authority over subordinate or other organizations with respect to administration and support, including organization of Service forces, control of resources and equipment, personnel management, logistics, individual and unit training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations.
- **Coordinating Authority** – A commander or individual who has the authority to require consultation between the specific functions or activities involving forces of two or more Services, joint force components, or forces of the same Service or agencies, but does not have the authority to compel agreement.
- **Direct liaison authorized (DIRLAUTH)** – That authority granted by a commander (any level) to a subordinate to directly consult or coordinate an action with a command or agency within or outside of the granting command.



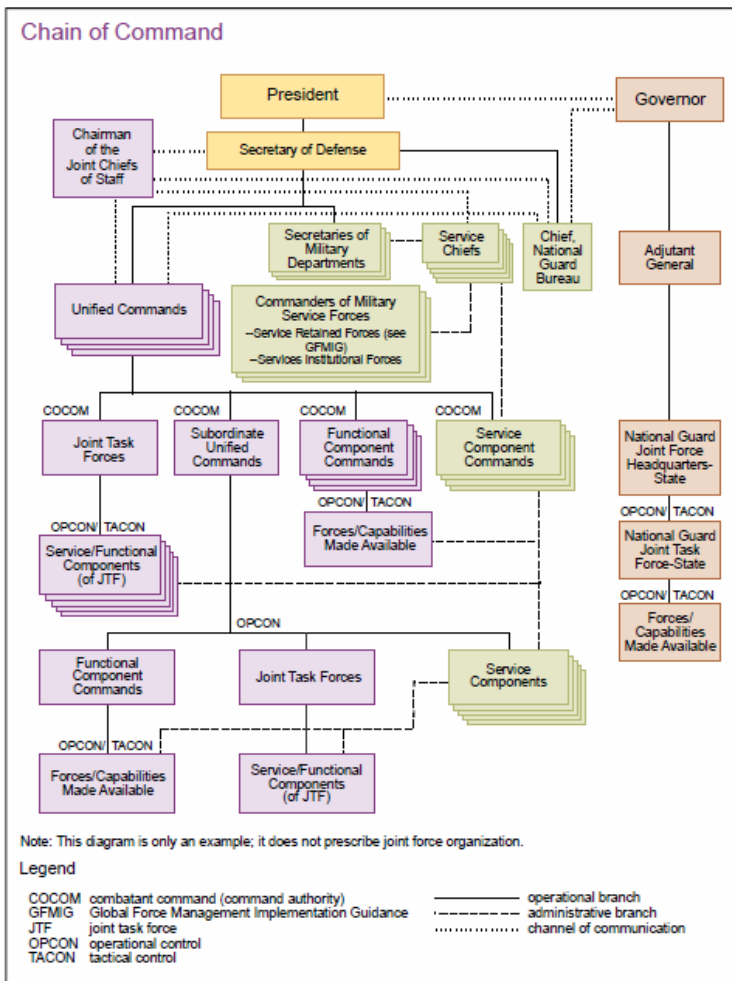


Figure I-2. Chain of Command

## OPERATIONAL INTELLIGENCE

- Designed to meet the Commander's operational and strategic objectives.
- Multiple sources (e.g., HUMINT, SIGINT, OSINT, GEOINT, MASINT, TECHINT) are used to collect data/info in order to analyze and produce Intelligence.

- **Joint Intelligence Preparation of the Operational Environment (JIPOE)/Intelligence Preparation of the Operational Environment (IPOE):**  
Doctrinally not a step in the NPP, but feeds initial NPP steps and supports throughout the process
  - JIPOE is conducted by the JFC (e.g., CJTF) and used to develop the Intel estimate and OPORD Annex B; IPOE is conducted by the components (e.g., C/JFMCC) and used to develop their products and provide support to component-level planning
  - JIPOE/IPOE is a continuous process designed to support the Commander's decision making
    - Provides Commander and staff with understanding of the OE and the adversary relative to the mission
    - JIPOE/IPOE products support the NPP and must be front-loaded into the planning process
    - Intel and ISR must be integrated with other operational functions
  - Four steps of IPOE (NWP 2-0 CH. 4):
    - Define the Maritime Operational Environment
      - Identify the naval force's Operations Area
      - Analyze the mission and commander's intent
      - Determine the significant characteristics of the maritime operational environment
      - Establish the limits of the naval force's Area of Interest (AOI)
      - Determine the level of detail required in the time available
      - Determine intel and information gaps
      - Collect material and submit RFIs
    - Describe the impact of the Maritime Operational Environment
      - Develop a geospatial perspective of the maritime operational environment
      - Leverage intelligence disciplines
      - Evaluate the impact of the maritime domain
      - Develop a systems perspective of the maritime operational environment
    - Describe the impact of the Maritime Operational Environment on adversary and friendly capabilities and broad Courses of Action, evaluate the enemy (factor force)
      - Update or create adversary models
      - Identify of High-Value Targets
      - Determine the current adversary situation
      - Identify adversary capabilities and vulnerabilities

- Identify Enemy Centers of Gravity and Decisive Points
- Determine Enemy Courses of Action
  - Identify the enemy's likely objectives and desired end state
  - Identify the full set of Enemy Courses of Action
  - Evaluate and prioritize each Course of Action
  - Develop each Course of Action in the amount of detail time allows
  - Identify initial collection requirements

## **OPERATIONAL FIRES**

- Fires are defined as the use of weapon systems or other actions to create specific lethal or nonlethal effects on a target.
- Planned/executed at the operational level of command.
- Types: lethal and nonlethal.
- Shape the battlespace in support of the operational objectives.
- Conducting targeting is one of the many Fires tasks / processes
- Operational fires:
  - Facilitate maneuver of friendly forces
  - Disrupt maneuver of enemy forces
  - Isolate the AO of a major operation or campaign
  - Neutralize the enemy's operational reserve
  - Neutralize enemy critical functions and facilities
  - Deceive the enemy as to the main effort

## **OPERATIONAL MOVEMENT AND MANEUVER**

- This function encompasses the disposition of joint forces to conduct operations by securing positional or informational advantages across the competition continuum and exploiting tactical success to achieve operational and strategic objectives.
- Movement is deployment of forces or capabilities into an operating area and relocating them within an operating area without expectation of contact with the enemy.
- Maneuver is employment of forces for offensive or defensive purposes while in, or expecting, contact with the enemy. It also includes assuring the mobility of friendly forces.
- Through maneuver, the operational Commander has the ability to develop the environment in the AO and determine the course or conditions for future success.

## OPERATIONAL PROTECTION

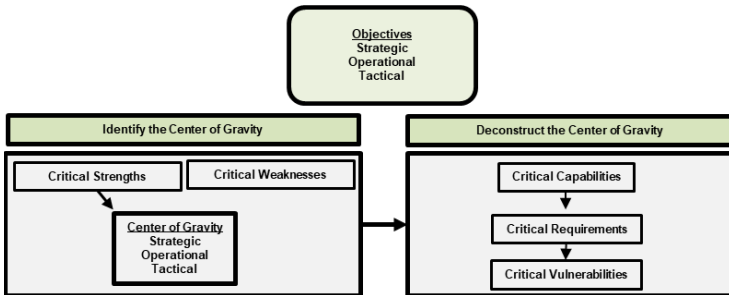
- Protection includes all efforts to secure and defend the effectiveness and survivability of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area to maintain mission effectiveness.
- Four primary methods:
  - Active defensive measures protect the joint force from attack
  - Passive defensive measures make friendly forces difficult to target
  - Apply technology/procedures to reduce fratricide
  - Reduce loss of personnel/capabilities to accidents and health threats
- The concept of protection describes how the commander envisions protection supporting the concept of operations. It includes the priorities of protection by mission area (e.g., air and missile defense, surface defense, sub defense, etc.) and addresses the scheme of operational area security, including security for bases, and critical infrastructure.
- Protection Planners
  - Determine the essential operational protection task(s), protection capability shortfalls, and priorities for employment of protection capabilities for each phase.
  - **Develop the proposed “critical asset list” for each phase.**
  - Observe task force representatives as they describe their force composition and assigned tasks.
  - Ensure critical assets have protection.
  - Discuss all remaining protection shortfalls (forces or authorities) with war game participants to determine risk mitigation.
- The protection working group meets as required to review and discuss operational protection issues:
  - Critical infrastructure protection (CIP);
  - AT/FP;
  - Mine warfare (MIW);
  - Antisubmarine warfare
  - Surface warfare
  - Integrated air and missile defense;
  - Chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE).
  - Protection of Civilians
  - Force Health Protection
  - Composition includes representatives from COPS, the maritime intelligence operations center, the logistics readiness center, the maritime planning group, staff judge advocate, information operations cell, counterintelligence cell, surgeon, AT/FP officer and subject matter experts (mine warfare, antisubmarine warfare, surface warfare, IAMD, CBRNE.)

- Protection Working Group outputs include protection staff estimates, force protection plans, protection matrices to assist the staff with risk and threat management, **and nominations for the critical asset list.**

## OPERATIONAL SUSTAINMENT

- Sustainment is the provision of logistics and personnel services required to maintain and prolong operations until successful mission accomplishment.
- Logistics is the planning and execution of the movement and support of forces.
- The seven principles of logistics are: Responsiveness, Simplicity, Flexibility, Economy, Attainability, Sustainability, and Survivability.
- The Logistics Readiness Center (LRC) determines the forces requirements, identifies sources of supply and manages the short falls; for numbered fleets, the senior logistician is typically both the assistant chief of staff for logistics and the LRC Director.
- Logistics determine operational reach, which can be extended to forward areas by:
  - Establishing new bases in forward areas
  - Deploying friendly forces into forward areas
  - Improvements in the transportation network
- Military classes of supply:
  - **Class I**—Subsistence (food), health, and comfort items
  - **Class II**—Clothing, tentage, tools
  - **Class III**—Petroleum, oil, lubricants (POL)
  - **Class IV**—Construction and barrier materials
  - **Class V**—Ammunition
  - **Class VI**—Personal demand items (hygiene products, snacks, alcohol)
  - **Class VII**—Major end items (launchers, tanks, vehicles)
  - **Class VIII**—Medical materials
  - **Class IX**—Repair parts
  - **Class X**—Non-standard material for nonmilitary programs (agriculture/economic development)

## Center of Gravity (COG) Analysis



**Identify the Objective:** An objective is a clearly defined, decisive, and attainable goal toward which an operation is directed.

- There are four primary considerations for an objective.
  - An objective establishes a single desired result (a goal).
  - An objective should link directly or indirectly to higher-level objectives or to the end state.
  - An objective is specific and unambiguous.
  - An objective does not infer ways and/or means; it is not written as a task.

### **Identify Critical Strengths and Weaknesses**

- Critical strengths and weaknesses are those attributes considered crucial for the accomplishment of the objective.
- These strengths and weaknesses (that describe the environment in relationship to the objective) should be identified and classified as either sufficient (critical strength) or insufficient (critical weakness).
- Critical strengths and critical weaknesses can be military or nonmilitary, and quantifiable (tangible) or unquantifiable (intangible).
- Each objective has critical strengths and weaknesses that are unique to that objective:
  - **Critical Strengths:** Which military or nonmilitary capabilities are considered essential to accomplish one's or the enemy's military objective(s) (and, in terms of quantity and quality, is sufficient and adequate to perform their intended functions.)? **The most important, or the one determined necessary to accomplish the OBJ among the critical strengths is the COG.**
  - **Critical Weaknesses:** "What are the military or nonmilitary capabilities considered essential to the accomplishment of one's or the enemy's military Objectives but, **in terms of quantity, quality, or both, are insufficient or inadequate to perform their intended functions.**
- The more discrete that planners are in the determination of critical strengths and weaknesses, the more focused are the COGs.

- Operational level COG's will typically be a physical force.
- \*\*Critical Strengths cannot be Critical Weaknesses / Critical Strengths may have vulnerabilities.**

**Identify the Center of Gravity (COG):** A COG is the source of power that provides moral or physical strength, freedom of action, or will to act.

- The planners must deduce which among those critical strengths identified rise(s) above all others in importance in accomplishing the objective; **This critical strength is the COG.**
- A method to determine if a Critical Strength is the COG:
  - **“Does this critical strength accomplish or is it required to achieve the objective?”** If the answer is no, it does not accomplish the objective but only assists in accomplishing the objective, it is probably not the COG.

**Deconstructing the COG:**

- **Direct Approach / Attack.** A direct approach attacks the enemy's COG or principal strength by applying combat power directly against it. However, COGs are generally well-protected and not vulnerable to a direct approach.
  - Since direct attacks against COGs mean attacking an opponent's strength, commanders and staffs must determine if friendly forces possess the power to attack with acceptable risk.
  - Commanders normally attack COGs directly when they have superior forces, a qualitative advantage in leadership, and/or technological superiority over enemy weapon systems.
- **Indirect approach/Attack.** An indirect approach attacks the enemy's COG by applying combat power against critical vulnerabilities that lead to the defeat of the COG while avoiding enemy strengths.
- Planners should analyze COGs within a framework of critical capabilities, critical requirements, and critical vulnerabilities.
  - **Critical capabilities:** A means considered a crucial enabler for a COG to function as such and is essential to the accomplishment of the specified or assumed objective; ***the primary abilities essential for the COG to accomplish the mission.***
  - **Critical requirements:** Essential conditions, resources, and means for the critical capability to be fully operational; ***what the COG requires to employ the critical capability.***
  - **Critical vulnerabilities:** An aspect of a critical requirement that is vulnerable to direct or indirect attack that will create **decisive or significant effects.**

- Critical Vulnerabilities will often translate into tasks for the tactical-level Commander:
  - Attacking Enemy Critical Vulnerabilities.
  - Protecting Friendly Critical Vulnerabilities.

**Identify Decisive Points (DPs):** A decisive point is *key terrain, key event, critical factor, or function* that, when acted upon, enables a commander to gain a marked advantage over an enemy or contributes materially to achieving success. As with all previous steps, the value of a DP is directly related to its relationship to a COG and its objective

- Although DPs are usually not COGs, they are the keys to attacking or protecting them.

**Tasks to Tactical Organizations:** Critical vulnerabilities identified during Center of Gravity Analysis and Deconstruction will often translate into tasks for tactical-level commanders. Examples include protection tasks to address own-force critical vulnerabilities, and strike tasks to exploit enemy critical vulnerabilities.

## Risk

- Risk is inherent in any use of military force or routine military activity. Opportunity and risk have an inherent relationship that in many cases influences course of action decisions. Greater opportunity may require greater risk.
- Based upon higher headquarters input, direction and guidance, the commander alone determines how and where to accept risk, but the staff plays a critical role in helping the commander identify the various risks and offering options for mitigation.
- Senior commanders have the responsibility of conveying decision-quality risk guidance to subordinate commanders to guide their initiative.

Navy doctrine does not define “decision-quality risk guidance,” but it is more than a commander stating that he/she is willing to accept ‘high’, ‘medium’ or ‘low’ risk. Admiral Nimitz’s guidance prior to the Battle of Midway that “You will be governed by the principle of calculated risk, which you shall interpret to mean the avoidance of exposure of your force to attack by superior enemy forces without good prospect of inflicting ... greater damage on the enemy” is an example of decision-quality risk guidance.

- Common understanding of risk throughout all levels of warfare informs decisive action and enables bold execution by leaders who understand commander’s intent and are willing to close with and defeat the enemy when they glimpse opportunities in the risk-reward calculus.
- Operational risk is a function of the probability and consequence of failure to achieve mission objectives (risk to mission) while protecting the force from



unacceptable losses (risk to force). Operational level of war commanders and planners focus principally on risk to mission.

**BEST PRACTICE:** A technique to help the planning team identify risks and threats is:

- **State the objective.**
- **List the center of gravity that will accomplish that objective.**
- **Identify the risks that could prevent the center of gravity from achieving that objective.**
- **Determine the threats that could manifest in the risks to mission occurring.**
- **Identify risks and threats associated with identified Critical Vulnerabilities and unvalidated assumptions.**
- **Address 'risk to force' as those threats that the enemy could employ which could impact the force, but not prevent the COG from achieving the objective.**
- **Assess and mitigate the threats per the five-step Risk Management Process listed below.**

- The risk management process uses a five-step methodology:
  - Identify threats
  - Assess threats
  - Develop controls and make risk decisions
  - Implement controls
  - Supervise and evaluate
- Risk Probability Definitions
  - **Frequent:** Occurs very often, continuously experienced
  - **Likely:** Occurs several times
  - **Occasional:** Occurs sporadically
  - **Seldom:** Remotely possible, could occur at some time
  - **Unlikely:** Can assume will not occur, but not impossible
- Risk Severity Categories (focusing on risk to mission)
  - **Catastrophic (I):** Loss of ability to accomplish the mission or mission failure; loss of major or mission-critical system or equipment; unacceptable collateral damage.
  - **Critical (II):** Significantly degraded mission capability; extensive damage to equipment or systems; significant collateral damage
  - **Marginal (III):** Degraded mission capability; minor damage to equipment or systems
  - **Negligible (IV):** Little or no adverse impact on mission capability; slight equipment or system damage but fully functional and serviceable
- Risk Assessment Definitions
  - **Extremely High Risk:** Loss of ability to accomplish the mission if threats occur during mission

- **High Risk:** Significant degradation of ability to accomplish mission, inability to accomplish all parts of the mission, or inability to complete the mission to standards if threats occur during mission
- **Moderate Risk:** Expected degraded mission capabilities if threats occur during mission
- **Low Risk:** Little or no impact on mission accomplishment

		Probability				
Severity		Frequent A	Likely B	Occasional C	Seldom D	Unlikely E
Catastrophic	I	E	E	H	H	M
Critical	II	E	H	H	M	L
Marginal	III	H	M	M	L	L
Negligible	IV	M	L	L	L	L
E—Extremely High		H—High		M—Moderate		L—Low

## Planning

- Joint doctrine identifies two basic types of plans, campaign plans and contingency plans
- **The Combatant Command Campaign Plan** consists of all plans contained within the established theater or functional responsibilities, to include contingency plans, subordinate and supporting plans, posture plans, country-specific security cooperation sections for country plans (for CCMDs with designated AORs), and operations in execution. They are not just plans, they are campaigns in execution, and link current operations to contingency plans
- **Planning for a contingency** encompasses the activities associated with the development of plans for the deployment, employment, sustainment, and redeployment of forces and **resources in response to potential crises identified in joint strategic planning documents.**
- There are four levels of planning detail for contingency plans, with an associated planning product for each level.
  - **Level 1 Planning Detail—Commander’s Estimate:** This level of planning has **the least detail**. It produces multiple COAs to address contingencies. The product for this level can be a COA briefing, command directive, commander’s estimate, or a memorandum with a proposed force list. The commander’s estimate provides Secretary of Defense with military COAs to meet a potential contingency. The estimate reflects the commander’s analysis of the various COAs and recommends a COA.
  - **Level 2 Planning Detail—Base Plan (BPLAN):** A BPLAN describes the CONOPS, major forces, concepts of support, and

anticipated timelines for completing the mission. It normally does not include annexes. A BPLAN may contain alternatives, including FDOs and FROs, to provide multiple options to address contingencies as they develop or to shape the developing situation

- **Level 3 Planning Detail—CONPLAN:** A CONPLAN is an OPLAN in an abbreviated format. It may require considerable expansion or alteration to be converted into a complete and detailed level 4 OPLAN or an OPORD. It includes a plan summary; a BPLAN; and usually includes the following annexes: A (Task Organization), B (Intelligence), C (Operations), D (Logistics), J (Command Relationships), K (Command, Control, Communications, and Computer Systems), S (Special Technical Operations), V (Interagency-Interorganizational Coordination), and Z (Distribution)
- **Level 4 Planning Detail—OPLAN:** An OPLAN is a **complete and detailed plan**. The OPLAN identifies the force requirements, functional support, and resources to execute the plan. It contains a full description of the CONOPS, all applicable annexes, a time-phased force and deployment list (TPFDL) and a transportation-feasible notional TPFDD, as well as analysis of the impact of a potentially contested environment on the joint deployment and distribution enterprise
- **Planning in a crisis** is based on circumstances that exist at the time planning occurs. In a crisis or time-sensitive situation, the Combatant Commander reviews previously prepared plans for suitability. The Combatant Commander may refine or adapt these plans into an executable OPORD or develop an OPORD from scratch when no useful contingency plan exists.
  - Planning initiated in response to an emergent event or crisis uses the same construct as all other planning but is compressed to the time available. When possible, planners leverage previously prepared plans as a starting point in a crisis, modifying as required to meet the operational circumstances. If no previously developed plan is suitable, then planning begins from scratch
- There are three possible conditions for transitioning planning to execution.
  - Contingency Plan Execution. Contingency plans are planned in advance to typically address an anticipated crisis.
  - Crisis Planning to Execution. Crisis planning is conducted when an emergent situation arises.
  - Campaign Plan Execution. Activities within Combatant Commander Campaign Plans are in constant execution.

## Planning Comparison

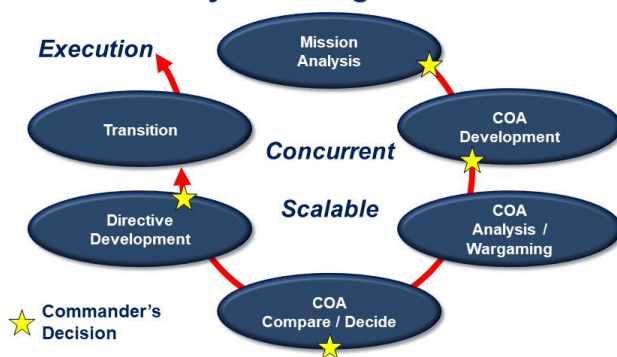
	Planning for a Contingency	Planning in a Crisis
Time Available	As defined in authoritative directives (normally 6+ months)	Situation dependent (hours, days, up to 12 months)
Environment	Distributed, collaborative planning	Distributed, collaborative planning and execution
Facts and Assumptions	Significant use of assumptions	Rely on facts and minimal use of assumption
JPEC Involvement	Full JPEC participation (Note: JPEC participation may be limited for security reasons.)	Full JPEC participation (Note: JPEC participation may be limited for security reasons.)
Operational Activities	Situational awareness Planning Assessment	Situational awareness Planning Execution Assessment
Planning Functions	Strategic guidance Concept development Plan development Plan assessment	Strategic guidance Concept development Plan development Plan assessment
Document Assigning Planning Task	1. JSCP (CJCS)/CPG (SecDef) 2. Planning directive 3. WARNORD (for short suspense planning)	CJCS issues: 1. WARNORD 2. PLANORD 3. SecDef-approved ALERTORD
Forces for Planning	Apportionment tables in GFMAP	Allocated in WARNORD, PLANORD, or ALERTORD.
Planning Guidance	CJCS issues JSCP or WARNORD. CCDR issues PLANDIR and TPFDD LOI.	CJCS issues WARNORD, PLANORD, or ALERTORD. CCDR issues WARNORD, PLANORD, or ALERTORD and TPFDD LOI to subordinates, supporting commands, and supporting agencies.
COA Selection	CCDR prepares COAs and submits to CJCS and SecDef for review. Specific COA may or may not be selected.	CCDR develops commander's estimate with recommended COA, and, as appropriate, alternative COAs to achieve different end states.
CONOPS Approval	SecDef approves planning or directs additional planning or changes.	President/SecDef approve COA, disapproves or approves further planning.
Final Planning Product	Campaign plan. Level 1-4 contingency plan.	OPORD
Final Planning Product Approval	CCDR submits final plan to CJCS for review and SecDef for approval.	CCDR submits final plan to President/SecDef for approval.
Execution Document	Not applicable.	CJCS issues SecDef-approved EXORD. CCDR issues EXORD.
Output	Plan	Order/Execution

### Legend

ALERTORD	alert order	JSCP	Joint Strategic Campaign Plan
CCDR	combatant commander	LOI	letter of instruction
CJCS	Chairman of the Joint Chiefs of Staff	OPORD	operations order
COA	course of action	PLANDIR	planning directive
CONOPS	concept of operations	PLANORD	planning order
CPG	Contingency Planning Guidance	SecDef	Secretary of Defense
EXORD	execute order	TPFDD	time-phased force and deployment data
JPEC	joint planning and execution community	WARNORD	warning order community

# Navy Planning Process

## Navy Planning Process



### ORGANIZATION, METHOD, TIMELINE

- **Organize:** The OPT leader is the facilitator, keeps the planning on track, and ensures the planning spaces have necessary support materials available (butcher block paper, pens, maps, IT support, etc.).
- Based on OPT manning and available time, the OPT leader may consider breaking off smaller teams to work as breakout groups addressing sub-steps of the planning process.
- Group size may dictate that some people will have more than one job. Designate individuals responsible for building the brief, submitting RFIs, RFFs, and other planning-related tasks.
- **Method:** During the initial meeting, establish and brief business rules for the OPT, discuss deliverable(s) for products, and lay out responsibilities for who will be in which working group(s). Determine when and how much time to devote to the breakout groups and when to reconvene the whole team to conduct back-briefs, finalize as a group, and provide additional guidance. Identify expectations for the level of detail for each breakout group and when to move forward from one step to the next.
  - **Use “Regressive Planning (Backward Planning)”:** Develop a planning timeline that incorporates all the steps required; start with the date and time when the product is due to the Commander and then develop the timeline backward; **post the timeline for all the team to see**
  - **Collaboration:** Ensure the OPT does not work in a vacuum. Reach out to HHQ and adjacent and subordinate organizations to establish solid working relationships ASAP

- **Products:** Brainstorm and maintain hard copies throughout the NPP; capture all butcher block and whiteboard products electronically for future use; post the mission analysis brief template on the bulkhead for situational awareness and final slide makeup; do not throw anything away!
- **Rehearsal:** Build time for at least one briefing rehearsal if time permits.
- **Synchronization matrix:** Assign someone as the POC for the synch matrix; this should begin during Mission Analysis as a recording tool.
- **Timeline:** Be cognizant of time vs. tasks; be ready to adjust as required without missing any steps; OPT leader should consider tasking the deputy to be the timekeeper to move the process along
- **Display key information prominently:** Commander's planning guidance, timeline, deliverables, RFIs, etc.
- **Execution / Daily Tempo**
  - Start-up brief
    - RFI update
    - Intel/Ops Review
    - Updates to facts and assumptions
    - Timeline review
    - Planning awareness (where we are in the process)
    - Product status
    - Today's suspenses
  - Any brief-backs to the MOC director
  - Today's breakout groups
  - Reach-back to staff elements or national assets
- **Briefing / Post Brief Refinements**
  - During every brief with the Commander, designate a note taker to capture all of the Commander's comments
  - Ensure all Commander's guidance is incorporated into the plan.
  - If you have questions about the Commander's Guidance, ask for clarification.

## SYNCHRONIZATION MATRIX

- The synchronization matrix is a staff decision and planning aid that graphically reflects the execution of an operation throughout its phases and, when used properly, ensures a COA is synchronized across time, space, and purpose in relation to the operation's objectives. The most important function of the

synchronization matrix is to help ensure that tasks are done at the appropriate time and in the correct order.

- Initial synchronization matrix construction begins during Mission Analysis
  - Use a spreadsheet to capture the information
  - Capture specified and initial implied tasks across phases (list each task in a separate cell)
- Arrangement of tasks to forces in time, space and purpose begins in COA Development
  - Capture the task organization that supports the COA
  - Capture assignment of all tasks (specified and implied) and purposes to forces across phases (note that similar tasks may be assigned to multiple subordinate Commanders (e.g., identical tasks in different locations)) – ensure that you capture all
  - Capture supported/supporting/coordinating tasks between components and subordinates, and command and control changes.
  - Capture movement/maneuver tasks
  - Capture priorities for fires and targeting (lethal and non-lethal), intelligence collection, and protection of high-value units.
  - Capture key logistics information such as needed locations, key stores/items, logistics timing issues.
  - Capture required authorities/ROE, JFMCC decision points, branch plans required, risk guidance and any other relevant elements of the plan.
- Refinement continues during COA Analysis (war gaming)
  - Use the synchronization matrix to build the war gaming worksheet
  - War gaming record output aids refinement of synchronization matrix
- The synchronization matrix forms the basis for the Tasks sub-paragraph in the execution paragraph of the order or plan.
- A good synch matrix also facilitates transitioning the order to execution. The synch matrix can provide the COPS cell a detailed template of how the operation was planned to flow and help the COPS cell recognize when the order is off course due to friendly, enemy, and environmental interaction.

### Example Synchronization Matrix

	Phase I	Phase II	Phase III	Phase IV
Estimated Duration of Phase				
CFMCC Phase Beginning Conditions				
CFMCC Phase Ending Conditions				
CFMCC Phase Objectives				
Tasks to Subordinate Units				
CTF XXX				
CTF YYY				
CTF ZZZ				
Tasks to adjacent components support of CFMCC				
CFACC				
CFSOCC				
CFLCC				
Coordination with adjacent unit				
CFACC				
CFSOCC				
CFLCC				
Adjacent Force 1				
Adjacent Force 2				
Coordinating instructions				
Operational / Joint Functions				
Command and Control				
Intelligence				
Movement and Maneuver				
Fires				
Sustainment				
Protection				
Information				
Authorities required				
Decision Points				
Branches				
Risk guidance				

**BEST PRACTICE:** List one task per cell. List tasks that continue into the next phase on the same row; for tasks that do not continue, leave subsequent cells in that row blank

## DECISION SUPPORT TEMPLATES / DECISION SUPPORT MATRICES

**Decision Support Templates (DSTs) and Decision Support Matrices (DSMs)** provide a critical connection between planning and execution. The primary value of the DST/DSM is to capture the linkages between decision points, CCIRs, and planner-identified decision options when CCIR-related events occur, enabling rapid decision-making during execution. When identifying relevant decision points, planners must consider decisions that must be made which are directly or indirectly related to accomplishment of the objectives.

- **Decision Support Matrix (DSM):** A matrix associated with a DST that has a column for CCIRs, a column for decision options if the CCIR event occurs, a column for decision support criteria supporting the CCIR, and a column that identifies a geographic area related to the decision



- **Decision Support Templates (DST):** A combined intelligence and OPS graphic based on the results of war gaming. The DST depicts the geographic locations of where CCIR-related events are expected to occur.
  - The DST/DSM records decisions the commander should anticipate for operational level contingencies that would disrupt execution of the CONOPS should they occur. **The DST/DSM captures advance thinking about what-if scenarios.**
  - Initial identification of CCIRs and decision points will begin as part of Mission Analysis. Decision points and decision options (by phase of the operation) are identified and refined throughout the planning process.
  - A separate DSM/DST for each phase of the operation may need to be developed depending on the complexity of the operation.
  - The DST/DSM is a critical document to be provided in transitioning an order from planning to execution (FOPs to COPs). The DST/DSM provides an immediate list of valid decision options to recommend in execution once a CCIR related event occurs.

**BEST PRACTICE:** A technique to help the planning team determine proposed decision points (DPs) for the Commander is provided below.

**Operation CHROMITE (Amphibious Assault on Inchon- 1950)**

*Example*

DP	CFMCC CCIR's	Decision Options	Decision Support Criteria	Location
Decision Point Name  <i>(Example Row)</i>	1.1 FFIR/PIR 1.2 FFIR/PIR 1.3 Etc.	1.A Delay until conditions are met 1.B Reinforce with additional forces 1.C Attack IOT exploit advantages 1.D Withdraw and use an alternate location	1.A.1 What information would support a given decision option? 1.A.2 Criteria are more general than CCIRs? 1.B.1 What conditions need to be established for any action?	Where?
Decision Point 1 Commence Amphib Assault on Wolmi-Do Island	<ul style="list-style-type: none"> <li>PIR 1.1 - Will the Enemy Mine the Approach Channel?</li> <li>PIR 1.2 - Have the NK Surface Batteries been neutralized?</li> <li>PIR 1.3 - Has the Enemy deployed surface vessels IVO landing beaches?</li> </ul> FFIR 1.1 - Are all coalition forces on station?	<ul style="list-style-type: none"> <li>Conduct the Assault.</li> <li>Delay the Assault until pre - conditions are met.</li> <li>Conduct assault at alternate locations</li> </ul>	<ul style="list-style-type: none"> <li>JTF -7 conditions to conduct Amphibious Assault are established.</li> <li>JTF- 7 Conditions to conduct raid are not established.</li> <li>JTF - 7 decides to conduct CFLCC attack early/JTF CONOPS changes.</li> </ul>	Wolmi Do Landing Beaches (NAI 1)



**Step 1:** Determine anticipated Commander's Decision Points (DPs) for each phase of the operation. Not every action in a phase will require the commander to make a decision.

**Note:** On order tasks / Be Prepared To tasks / Phase Commence and Ending are often a Commander level decision.

**Step 2:** Develop decision options. Present viable options for the commander to choose when a DP has to be made.

**Step 3:** Develop Decision Support Criteria. Information that helps determine the best option.

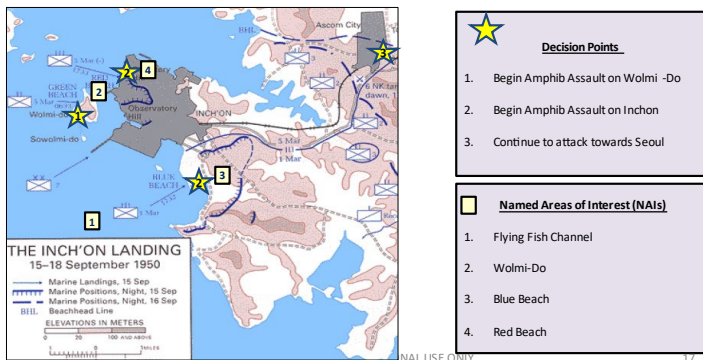
**Step 4:** Develop Commander's Critical Information Requirements (CCIRs) that support the anticipated Decision. These are separated into Priority Intelligence Requirements (PIRs) focusing on Enemy / Environment and Friendly Force Information Requirements (FFIRs) focusing on Friendly forces.

**Step 5:** Geographic location of the decision. This can be a geographic location, or along a designated Named Area of Interest (NAI).

**Step 6:** Annotate Decision points on the accompanying DST which displays the graphic locations of where CCIR events / Commander's decisions are likely to occur. The DSM should be developed first.

### Decision Support Template (DST)

Example



## **NPP Step One: Mission Analysis**

Mission analysis is framing the problem. It builds the foundation for the entire planning process. Its purpose is to give the command, staff and planning team an increased level of understanding and appreciation for the tasking from HHQ and the ends, ways, and means available to accomplish that tasking. When completed correctly, Mission Analysis provides the who, what, when, where, and why for the component and enables development of the how during the next step of the Navy Planning Process.

### **INPUTS**

- From Higher Headquarters
  - Plans, orders and guidance
  - Intelligence products
  - Staff estimates
- From the Commander
  - Initial planning guidance
  - Initial Commander's intent
  - Design products (if used)
- From the Staff
  - Initial staff estimates

### **PROCESS**

- **Identify source(s) of the mission** - The source of the mission is normally found in a HHQ directive. To plan effectively, planners must also aggressively identify and analyze references, those documents relevant to the mission and area of operations.
- **Review the commander's initial planning guidance** - Planners analyze the JFMCC Commander's guidance to ensure a thorough understanding. If aspects are unclear, or inconsistent with known information, planners must clarify with the commander.

**BEST PRACTICE:** Print a copy of the commander's planning guidance and post it in the OPT room. Refer back to the guidance throughout the steps of the NPP to ensure that the plan meets the commander's guidance.

- **Receive IPOE briefing** – OPT members must have a detailed understanding of the Operational Environment. The N2 should begin developing the IPOE prior to the OPT beginning planning. N2 representatives should brief the OPT at this point and should continue to update the OPT through all steps of the NPP.

- **Identify command relationships** – Understand the command relationships between your commander and the commander’s assigned forces, adjacent components/commands, coalition forces, and HHQ, as defined by higher headquarters.
- **Analyze higher command’s mission and intent** – Review the higher headquarters mission statement, commander’s intent and concept of operation to thoroughly understand the forthcoming military action.

**BEST PRACTICE:** While NWP 5-01 directs planners to read only the higher headquarters mission and commander’s intent during this sub-step, planners should thoroughly review the higher headquarters Concept of Operations in order to gain a clear understanding of the operation and the CMFCC’s role within that operation.

- **Determine specified, implied and essential tasks**
  - Specified tasks: Review the HHQ directive and identify those tasks assigned to the JFMCC. Review each task to ensure the OPT members understand each task’s requirements and purpose.
  - Implied tasks: Implied tasks are not specifically stated in the HHQ order but are additional tasks that must be performed to accomplish specified tasks or the mission.

**BEST PRACTICE:** Review each specified task for associated implied tasks, then review the operational functions for associated implied tasks. Do not include routine tasks or SOPs as implied tasks. Note that not all specified tasks have associated implied tasks.

- Essential tasks: Those tasks that MUST be executed to achieve mission success; used to develop proposed mission statement.
- **State the purpose of the operation** – During this sub-step, planners develop the JFMCC’s purpose of the operation. This will become the purpose portion of the mission statement later in mission analysis.

**BEST PRACTICE:** Examine the purpose portion of the essential tasks and use those to craft an overarching purpose for the operation.

- **Identify externally imposed limitations**
  - A restriction placed on the command by a higher command, which dictates an action or inaction, thus restricting the freedom of action of a subordinate commander.
  - Restraints (can’t do) and constraints (must do).

**BEST PRACTICE:** While the current version of NWP 5-01 instituted a change to the format for operations orders which includes a dedicated section for Limitations, the format has yet to be widely adapted in the Fleets. Planners should review the entire order, as well as key reference documents for limitations.

- **Identify facts and develop planning assumptions**

- Assumptions given by HHQ are treated as facts by subordinate Commanders for planning purposes.
- Only make assumptions to fill gaps in knowledge that are necessary to continue planning.
- Assumptions must be validated or disproved, or they contribute to risk.
- Do not assume away an enemy capability.

**BEST PRACTICE:** Check each assumption against the criteria of whether it fills a gap in information that is necessary to continue planning. If it doesn't pass that test, delete that assumption.

- **Analyze available forces and assets**

- Identify any potential shortfalls between all tasks identified during mission analysis and the forces or subject matter/technical expertise available to carry out the tasks.

- **Determine friendly Center of Gravity, and decisive points**

- Use the methodology listed in the Center of Gravity Analysis section of this document

- **Conduct initial risk assessment**

- Identify and assess threats by phase/stage of the operation.
- Use the methodology listed on listed in the Center of Gravity Analysis section of this document

- **Develop proposed mission statement**

- Derived from essential tasks.
- The mission statement is a short sentence or paragraph that describes the JFMCC's essential tasks and purpose—a clear statement of the actions to be taken and the reasons for doing so.

# Mission

Clear statement of the organization's mission:

- Should be understood two echelons below
- Includes the **essential tasks** and **purpose**
- Answers the **WHO, WHAT, WHEN, WHERE, and WHY** of the operation

[At time or condition] [Command] [Essential Task 1], [ET 2],... in  
Order To [Purpose].

- **Develop proposed updates to commander's intent**
  - If the commander provided an initial commander's intent, propose updates based on the results of mission analysis.
  - If the commander did not provide an initial commander's intent, the planning team should draft one and present to the commander for review.
- **Develop initial Commander's Critical Information Requirements (CCIRs);** comprised of Priority Intelligence Requirements (PIRs) and (Friendly Force Information Requirements (FFIRs)
  - Must be tied to decision points.
- **Conduct mission analysis briefing**
  - Use your command's approved format.
- **Develop warning order(s)**
  - Once the commander approves or modifies the results of mission analysis, the planning team may draft and issue a WARNORD to subordinate units.
  - WARNORD should include the approved mission statement, the commander's intent, the commander's planning guidance, and any other information that will assist subordinate units with their planning.

**BEST PRACTICE: NWP 5-01 includes a format for warning orders. While planners should adhere to that format to the maximum extent possible, focus on drafting the warning order with known pieces of information that will assist the subordinate units to prepare for the operation. Don't delay releasing the warning order to await further information.**

- **Develop Commander's planning guidance**
  - Focuses the planning team during COA development.
  - Should include mission success criteria.

- The planning team may develop draft governing factors at this point. Governing factors are those aspects that the commander deems critical to the accomplishment of the mission.

## OUTPUTS

- Approved Mission statement
- Approved commander's intent
- Approved commander's critical information requirements
- Approved commander's planning guidance
- Warning order(s) (WARNORDs)
- Updated staff estimates

**Best Practice:** Begin developing the synchronization matrix during Mission Analysis. During mission analysis, record all tasks (specified and implied) and phase beginning and phase ends from the HHQ order. Planners will significantly expand the synchronization matrix with additional information during COA Development.

**\*\*NOTE:** The Synchronization Matrix offers planners a single source document that captures the planning conducted during the steps of the NPP. If completed correctly, all the information necessary to develop the directive will be captured in a single document.

## **NPP Step Two: Course of Action Development**

Planners generate Courses of Action, potential solutions to accomplish the mission which satisfy the commander's intent and planning guidance.

### **INPUTS**

- From Higher Headquarters
  - Directives (e.g., Warning order, Operation order, OPLAN, etc.)
- From the Commander
  - Mission statement
  - Commander's intent
  - Planning guidance
  - Governing factors
- From the staff
  - Updated IPOE (including enemy COAs)
  - Initial risk assessment
  - Staff estimates
- Other products
  - Specified, implied, essential tasks
  - Limitations
  - Assumptions
  - Resource shortfalls
  - COG analysis (friendly and enemy)
  - CCIRs

### **PROCESS**

- **Discern the Common Framework:** The common framework is the series of objectives and actions, established by higher headquarters directives and commander's planning guidance, focused on accomplishing the mission. The common framework applies to all COAs that the planners develop.
  - Use tasks identified during mission analysis to help conceptualize and describe decisive, supporting, shaping, and sustaining actions
    - **Decisive Action:** The decisive action (identified as an essential task) is the activity that accomplishes the objective and becomes the focus of the Main Effort (when the action (task) is assigned to a specific unit).
    - **Supporting Action(s):** Activities that directly support the decisive action, i.e., set conditions that enable accomplishing the objective.
    - **Shaping Action(s):** Activities conducted by friendly forces to set conditions for the success of subsequent operations.
    - **Sustaining Action(s):** Activities conducted by friendly forces to provide logistics and personnel services.



- **Analyze relative combat power.** Planners conduct a Relative Combat Power Analysis (RCPA) to analyze friendly and enemy tangible (quantitative) and intangible (qualitative) factors by comparing each force's size, capabilities, strengths, and weaknesses, and then summarizing enemy/friendly force advantages/disadvantages. The most important information derived from an RCPA is an understanding of which factors provide each force an advantage. Planners apply insights from RCPA as they develop COA options.
- **Generate COA options:** The planning team applies critical thought, imagination, and creativity to produce a range of options within the boundaries established by the common framework.
- **Developing the COA:**

**BEST PRACTICE: When developing the COA use a planning map, large enough to depict the entire Maritime Area of Operations, and 'annotate' that map with 'sticky notes' or magnetized notes.**

- **Establish the COA's framework**
  - Start with the common framework tasks identified in mission analysis
  - Annotate the common framework tasks on the planning map in the area(s) in which forces will need to execute those tasks.
  - Identify tasks specific to the COA, as directed by commander's planning guidance, and annotate those on the planning map.
- **Array initial forces**
  - Place generic platform icons on the map to represent the type capabilities required to execute each task.
  - This enables an accurate determination of the forces needed to accomplish tasks, identifies enemy-friendly relative combat power comparisons at specific locations, and conceptualizes responsibility geographically (for future control measures).
  - Planners use generic forces at this point to avoid fixation on specific units and to allow the staff to build a solid conceptual plan first that will be populated with specific units in a later step.
- **Translate Operational Tasks into Tactical Tasks**
  - Review each of the tasks and translate any operational level tasks into tactical level task that would be appropriate to assign to a subordinate Task Force Commander. The Universal Naval Task List (UNTL) lists tactical level tasks.
- **Convert generic units to specific units**

- During this step, planners convert the generic units identified earlier to specific units by assigning available forces to each task and annotating those units on the planning map.
- **Task organize and recommend C2 relationships**
  - Planners organize all of the forces into task forces, and assign tasks to those task forces.
  - Ensure that subordinate forces are properly organized, sized, and resourced to accomplish their assigned tasks.

**BEST PRACTICE: Assign commanders to each task force at this point. Ensure that each commander's headquarters are sufficiently manned and resourced.**

- **Apply effort construct.** Designate which task force is the Main Effort in each phase as well as Supporting, Shaping and Sustaining Efforts:
  - **Main Effort:** The designated activity or subordinate organization whose mission at a given time (i.e., phase, stage, or step) is most critical to overall mission success; usually weighted with the preponderance of resources by the higher organization
  - **Supporting Effort:** The designated activity or subordinate organization(s) whose mission at a given time is designated to directly contribute to the success of the main effort (i.e., protects, enables, or supports the main effort)
  - **Shaping Effort:** The designated activity or subordinate organization(s) whose mission at a given time creates desired conditions or effects for current or future activities but does not directly support the main effort (i.e., can be actions, fires, or separate objectives not in support of the main effort)
  - **Sustaining Effort:** The designated activity or subordinate organization whose mission is directed at sustaining friendly forces
- **Determine control measures**
  - Subdivide the Maritime Area of Operations to best facilitate command and control of the operation.
- **Synchronize and Sequence Actions**
  - Planners arrange the forces' actions in terms of time, space, and purpose. Additionally, the planners determine the anticipated duration of the operation, highlighting the phase begin and end criteria. Phase begin and end criteria describe the conditions necessary to shift from one phase of the

operation to the next and include description of own force, enemy force and environment conditions.

- Other considerations to address are when and under what conditions the Main Effort may shift, when the Main Effort is committed, and when success may be exploited.
- **Recommend command and control relationships and structure**
  - Establish command relationships to include OPCON or TACON of assigned forces to task force commanders, and supported/supporting command relationships between task force commanders.

***Note: For a multi-phase COA the steps above should be repeated for each phase. Once the COA is developed for all phases, continue with the steps listed below. All COAs developed must accomplish the operation's specified and essential tasks within imposed limitations and nest within the HHQ's phasing construct***

- **Commander's input and refinement**
  - When possible, the planning team leader reviews the initial COA(s) with the commander, to ensure they conform to initial intent and the COA development planning guidance.
- **Prepare COA sketches and statements**
  - The COA sketch and statement broadly articulate the plan by providing a graphic and textual representation of the COA.
  - **Sketch:** Map of the JOA that identifies friendly and enemy positions by phase
    - Maritime domain control measures (e.g., Maritime Operations Areas, AOAs)
    - Identify main/supporting/sustaining/shaping efforts by phase
    - C2 structure that shows changes by phase
  - **Statement:** Overall description of the COA
    - Main/supporting/sustaining/shaping efforts listed by phase
    - Estimated phase duration
    - Force employment by phase
    - Identify location, sequencing of major units by phase
    - Identify phase end state criteria in the maritime domain
- **Review ROE**
  - Planners consider if supplemental ROE or other authorities are required to execute the COA. They should also identify any clarifications required with respect to the forces' ability to use force.

- **Refine initial risk assessment for each COA**
  - Develop controls and make risk decisions to mitigate risks identified during mission analysis
  
- **Test for validity** Planners review each proposed COA for validity. This test should address suitability, feasibility, acceptability, distinguishability, and completeness.
  - **Suitable/Adequate:** Accomplishes the mission within Commander's guidance; scope and concept of planned operations can accomplish the assigned mission and comply with the planning guidance provided
    - Does it accomplish the mission?
    - Does it meet the Commander's intent?
    - Does it accomplish all the essential tasks?
    - Does it meet the end state conditions?
    - Does it take enemy and friendly COGs into consideration?
  
  - **Feasible:** Accomplishes the mission within time, space, and resource limitations; mission can be accomplished using available resources within the time contemplated by the plan
    - Does the Commander have the force structure and lift to execute it?
    - Can other commanders support to fill shortfalls?
  
  - **Acceptable:** Balances cost and risk with the advantage gained; COA is proportional, worth the cost, consistent with the law of war, and is militarily and politically supportable
    - Does it contain unacceptable risk?
    - Does it take into account limitations placed on the Commander?
    - Are COAs reconciled with external constraints, particularly ROE and other policy guidance limiting civilian casualties beyond LOC requirements?
  
  - **Distinguishable:** Sufficiently varies from other COAs through:
    - Focus or direction of main effort
    - Scheme of maneuver
    - Sequential versus simultaneous maneuvers
    - Primary mechanism for mission accomplishment
    - Task organization
    - Use of reserves
  
  - **Complete:** Answers the who, what, where, when, how, why; includes forces required, deployment concept, employment concept, sustainment concept, time estimates for achieving objectives, description of the end state, mission success criteria, and mission termination criteria; it addresses:
    - Objectives and tasks/purposes

- Major forces required
  - Concepts for deployment, employment, sustainment
  - Time estimates for achieving objectives
  - Military end state and mission success criteria
- **Develop COA Analysis (war-gaming) guidance and COA evaluation criteria**
    - The planning team prepares COA analysis (wargaming) guidance for commander approval during the COA brief.
    - The planning team should also develop initial evaluation criteria recommendations for use in COA comparison and decision. Evaluation criteria include the commander's governing factors but may also include other criteria developed by the planners.
  - **Prepare COA briefing**
    - Use your command's approved format

## **OUTPUTS**

- Approved COAs
- Refined enemy COAs
- Course of action analysis (war game) guidance
- Initial evaluation criteria (for COA comparison)
- Refined commander's intent
- Refined staff estimates
- Refined risk assessment
- Recommended RFFs and RFCs
- Recommended supplemental ROE changes or additions or other authorities deemed necessary for mission accomplishment
- Initial, refined decision tools: synchronization matrix, DST/DSM, risk assessment matrix, and CCIRs

**BEST PRACTICE:** Continue developing *the synchronization matrix to include all tasks assigned to each Task Force listed by phase, command relationships assigned to and between task forces, coordination with HHQ, Adjacent and Supporting, recommended changes to ROE, and other information developed, identified or coordinated during planning.*

**COMMON TERMS FOR TASKS/PURPOSES:**

<b>Actions by Friendly Forces</b>					
Allocate	Attack	Collect	Conduct	Control	Coordinate
Delay	Deploy	Detain	Detect	Determine	Develop
Dominate	Embark	Employ	Engage	Enhance	Escort
Establish	Evacuate	Execute	Insert	Integrate	Maintain
Maneuver	Move	Navigate	Occupy	Perform	Prepare
Provide	Reconstitute	Search	Secure	Seize	Stabilize
Stage	Support	Synchronize	Track	Transit	Transport
Withdraw					

<b>Effects on the Threat</b>		
Block	Contain	Deceive
Defeat	Degrade	Deny
Destroy	Disrupt	Exploit
Interdict	Isolate	Limit
Neutralize	Suppress	Turn

<b>Common Purpose Statements</b>			
Allow	Cause	Create	Deny
Divert	Enable	Facilitate	Identify
Protect	Influence	Observe	Open
Preserve	Prevent	Support	Surprise

<b>Planning Days and Hours Definitions</b>
<b>C-Day:</b> Deployment operation commences.
<b>L-Hour:</b> Hour on C-day a deployment operation commences.
<b>D-Day:</b> Operation commences.
<b>H-Hour:</b> Hour on D-day an operation commences.
<b>E-Day:</b> Landing force begins to embark.
<b>M-Day:</b> Mobilization commences.
<b>F-Hour:</b> SecDef announces decision to mobilize Reserves.
<b>N-Day:</b> Active-duty unit is notified for deployment or redeployment.
<b>O-Day:</b> Off-load day
<b>R-Day:</b> Redeployment day.
<b>S-Day:</b> POTUS authorizes selective reserve call-up.
<b>T-Day:</b> POTUS declares a national emergency; partial mobilization.
<b>W-Day:</b> POTUS declares. Associated w/ adversary decision to prepare for war.

## **NPP Step Three: Course of Action Analysis / War-gaming**

**Course of Action Analysis:** Course of action analysis closely examines potential COAs to confirm their validity and refine those COAs, as needed, to account for enemy reactions. The commander and staff analyze each COA separately according to the commander's war-gaming guidance. ***COA analysis improves the plan by examining and refining friendly actions in light of enemy capabilities and potential reactions.***

**War-gaming:** War-gaming is the primary means used to conduct COA analysis. War-games are ***representations of conflict or competition*** in which people make decisions and respond to the consequences of those decisions. **War-games help visualize the flow of the operation** given friendly and enemy capabilities, strengths and dispositions, as well as other aspects of the Operational Environment (OE).

### **INPUTS**

#### **INPUTS**

- From the Commander
  - Mission statement
  - Commander's intent
  - Wargaming guidance
    - Which friendly COAs to war game against which enemy COAs
    - Critical events
    - Evaluation criteria
  - Governing factors
- From the staff
  - Current enemy COAs
  - Current IPOE products
  - Staff estimates
  - Current risk assessment
  - Preliminary synch matrix, DST and DSM
  - Facts and planning assumptions
  - RFFs/RFCs
  - Potential Authorities requests

### **PROCESS**

- **Organize Roles and Responsibilities**
  - **Planning Team Lead:** Controller who directs the war-game.
  - **COA Representatives:** These individuals describe their COAs to the remainder of the war game team, coordinate counteractions to respond to envisioned enemy reactions, and ensure that COA modifications are documented.

- HHQ / Adjacent Commander Representatives: Provide information and feedback/unity of effort/synchronization from their perspectives.
- Subordinate Command Representatives: These planning team members provide information and feedback concerning employment of subordinate forces during the war game. They explain their tasks and purposes, how their forces contribute to the higher COA, and what counteractions they may take in response to enemy reactions.
- Operational function planning representatives. These individuals provide information and feedback on the overall schemes of maneuver and fires, concepts of intelligence, sustainment, protection and command and control. They ensure that each COA adequately addresses their respective operational functions that are relevant to the envisioned operation.
- Intelligence Representatives. Play the roles of planner and analyst.
- Red Cell: The red cell is a composite cross-functional team from varied operational backgrounds and specialties. The Red Cell emulates a thinking enemy during the war game by reacting to friendly force actions. The red cell's OBJ is to **expose friendly critical vulnerabilities or gaps in their plan, improve feasibility and acceptability of the COAs** through rigorous pursuit of perceived enemy Objectives against each friendly COA. **The red cell is not trying to win or beat the enemy COA.**
- Special Staff. Other staff personnel such as Legal advisor / PAO / Chaplain / Medical planner / or other special staff may be included in the war game depending on the operation.
- **Review Planning Guidance and information**
  - Review friendly forces and their capabilities
  - Review enemy forces and their capabilities.
  - Review facts and assumptions.

**BEST PRACTICE: Review the COAs with the entire planning team to include adjacent and subordinate command representatives. Ensure the planning team understands the concepts and schemes from the operational function areas. This process may uncover gaps, or synchronization problems prior to commencing the actual wargame.**

- **Review Critical Events / Essential Tasks**
  - Review and confirm critical events that will be war gamed for each COA. (The critical event is normally an event directly tied to the accomplishment of the phase objective and the task the Main Effort is to accomplish). The Commander may direct which critical events are to be



war gamed, or the planning team lead may recommend a critical event to the Commander.

**BEST PRACTICE: *Planning team leads should consider potential friction points or most difficult parts of a COA when recommending the critical events to be war gamed.***

- **Select the War-game Method**
  - By Phase. War Game each phase of the operation paying particular attention to the phase transition criteria and end state of each phase.
  - By Deliberate Time Analysis. Discrete portions of time of the COA. (Example: D-Day to D + 5).
  - By Critical Event / Sequence of Essential Tasks. Focus on specific critical events in sequence. **(See Above)**
  - Belt: Divide the Maritime Area of Operations into a series of predetermined belts that span that Area of Operations. This technique is based on the sequential analysis of events in each belt that span the breadth and depth of the Maritime Area of Operations. ***This technique is often more appropriate for analyzing plans at the tactical level of warfare.***
  - Box: Focuses on a Critical event within a defined area. This method is a detailed analysis of an area, such as an Amphibious Objective Area or a portion of the maritime area of operation. ***The planning team designates the area and focuses on the critical events within that area. Several critical events could occur in the area. The planning team assumes friendly TFs not engaged in the critical events in the box can continue to execute their assigned tasks in their portion of the maritime area of operation. These forces are not part of the war-game turn.***
  - Avenue in Depth: This method focuses on one approach at a time, beginning with the Main Effort executing the decisive action, then Supporting Efforts that may be supporting the Main Effort or shaping the environment. ***This technique may be conducive to war-game turns that relate to a series of actions by forces operating independently toward a specific objective.***
- **Select Methods to Record and Display Results**
  - War-game Worksheet: Primary collection point for action-reaction-counteraction.

- Synchronization Matrix: The synchronization matrix, initiated earlier in the planning process, is carried forward to COA analysis and refined to become the basis of ensuing directives. **The tasks on the synchronization matrix are the Friendly action as part of the wargame turn.**

**BEST PRACTICE:** *Planning teams can use the synchronization matrix already initiated during the planning process and convert that matrix into the Wargame worksheet by adding additional columns for Reaction, Counteraction and modifications. (This should be a copy of the original Synchronization Matrix). Once the War Game is completed, planning teams should combine any counteractions, with the initial reactions on the original synchronization matrix, to develop the basis for the directive development. Other information can be added to the matrix such as other entities in the area of operations (i.e., host nation, other government, or nongovernment agencies), authorities, resource shortfalls, or coordinating instructions*

- Decision Support Products: Leverage the Decision Support Matrix/ Decision Support Template to acknowledge known decision points during the war-game and to capture emerging decision points.
- Additional War-game Records. Bring forward the following into the War Gaming step:
  - Strengths and weaknesses of each COA.
  - Additional or refined evaluation criteria.
  - Risk identification / assessment / mitigation.
  - COA sketch (control measures) / statement modifications.
  - Task organization changes.
  - Residual gaps in coordination or synchronization.
  - Facts and assumption updates.
  - Authorities.
  - Other issues.
- **Conduct the War-game and assess the results**
  - War-game initiation: Planning team lead or facilitator establishes expectations and explains how the game will be conducted. **Rules of the Road.**
  - Nominal War-game Turn
    - Action: Planning team leader guides the presentation of own-force actions to be analyzed. Friendly COA representatives, subordinate command representatives or operational functions representatives will present their actions (tasks and concepts of support) to the Red Cell, using the synchronization matrix to cover all of the relevant tasks and actions.

**BEST PRACTICE:** *Planning team lead provides the overall COA Sketch and Statement to include the Task Organization, Command Relationships and concepts of support to the Red Cell. It is important for the RED CELL to understand the entire COA.*

- Reaction: Red Cell then reviews and discusses the plan to identify any weaknesses, seams or gaps, and then determines any enemy actions that could exploit them. They then explain the reactions to the OPT.

**BEST PRACTICE:** *The Red Cell should understand the Friendly Center of Gravity analysis conducted by the planning team during the Mission Analysis step. The focus of the red cell is to expose identified Friendly Critical Vulnerabilities and gaps in the sequencing of the friendly plan. Friendly role players should ask questions of the Red Cell to understand the enemy's reaction*

- Counter-action: OPT role players then review the enemy reactions and develop counteractions, which are adjustments to the plan to correct weaknesses, seams or gaps that enemy reactions exposed.
- Decision Points: As decision points emerge during the war-game, a recorder annotates the synchronization matrix and decision support tools.
- Conduct Risk Assessment and Mitigation: Assess and refine the risk to mission and force as a result of the War Game and include additional mitigation measures as required.
- Record the results: **Results of the War Game may include:**
  - Modifications (as required) to the COA sketch/statement.
  - Additional tasks.
  - Task organization changes.
  - Synchronization and DST/DSM updates. Additional Decision Points may have been identified during the War Game.
  - Identify resource shortfalls.
  - Recommend adjusted evaluation criteria.
  - Recommended supplemental ROE.
  - Additional assumptions and facts.
  - Operational function representatives record information to take back to their staff directorates to assist in developing staff estimates.
- Assess the Results
  - Assess the COA in terms of feasibility, acceptability, suitability, distinguishability and completeness.

- **Course of Action Analysis Brief** – A COA Analysis brief to the commander is often not required unless there are changes to the approved COAs. (The COA Analysis Brief will depend on the SOP or procedures within each command).
- **Refine Staff Estimates**
  - Functional planners continue to update their staff estimates by capturing key functional support and execution issues to rectify as a result of the war-game turn.

## OUTPUTS

- Refined COAs with graphics, statement, task organization.
- Refined synch matrix.
- Refined DST/DSM as well as refined NAIs.
- Refined resource shortfalls.
- List of requested authorities and ROE refinement.
- Refined staff estimates.
- Evaluation criteria for COA comparison.
- Updated/new facts and assumptions.
- Branches and sequels Identified for development.
- Refined risk assessment
- Additional outputs can include:
  - Updated operational risk matrices to reflect risk mitigation.
  - Information Warfare objectives and tasks.
  - Recording the advantages and disadvantages of each COA as they become evident.
  - Intelligence collection plan and resulting ISR plan.
  - Targeting process integration to include identification and refinement of high payoff target(s).

## **NPP Step Four: Course of Action Comparison and Decision**

COA comparison is a **subjective** process whereby the commander evaluates friendly COAs against established evaluation criteria, compares them with each other, and selects a COA that best accomplishes the mission. Following the commander's decision, planners generate the concept of operations (CONOPS).

### **INPUTS**

- Refined COAs (from war game)
- Refined synchronization matrix
- War game results / worksheets
- Updated IPOE
- DST / DSM (from war game)
- Approved evaluation criteria and governing factors
- Refined staff estimates
- Proposed risk controls

### **PROCESS**

- The COA comparison and decision process highlights the differences, advantages, disadvantages, and risks of each COA, and ends with the commander selecting the COA that best accomplishes the mission.
- The planning team and staff should have a candid discussion on the merits of each COA, assess each against the evaluation criteria, and compare each to provide the commander with the information needed to select the COA with the best tradeoff of advantages, disadvantages, and risks to best accomplish the mission. Executing the evaluation and comparison step requires that everyone involved in this process understands the evaluation criteria and how they are defined.
- Evaluation criteria are defined as standards used by the staff during course of action comparison to help identify advantages and disadvantages of the various courses of action with the intent of making a decision recommendation to the commander.
  - Evaluation criteria include the commander's governing factors, as identified earlier in the planning process, but may also include other criteria developed by the staff.
  - The evaluation criteria should be clearly defined to minimize confusion and aid in the comparison process.

**BEST PRACTICE: Ensure that the commander approves the definitions of the evaluation criteria prior to conducting COA comparison**

- In the procedure for comparing COAs, the goal must be to assist the commander in reaching a sound decision. This step is subjective by its nature. The best method for accomplishing this is to highlight the advantages and disadvantages of each COA in a nonquantitative manner using the commander's evaluation criteria. This method provides the commander with enough detail to fully appreciate the differences between the COAs and make a sound decision. The most common technique is to use a COA comparison matrix to facilitate the comparison discussion.

### Example COA comparison matrix

Criteria	COA 1 100B – Inchon	COA 2 100C – Kunsan	COA 3 100D – Chumunjin	Modifications
<b>Decisive Point</b> (allows us to rapidly seize the decisive point)	(+) Rapid seizure of Seoul (DP); strong psychological impact; cutting of logistics hub and LOCs	(-) No DP in vicinity	(-) Over 100 miles (straight line) across the peninsula from Seoul	Retain Kunsan landing as a feint
<b>Operational Reach</b> (maximizes the flexibility and potential operational reach of our amphibious forces)	(+) Deep envelopment (-) All logistics must move over beaches until 'Yellow Beach' port facility established	(-) Short envelopment (+) Well developed port	(+/-) Deep envelopment... ...to nowhere	None
<b>Movement-Maneuver</b> (facilitates rapid movement and maneuver ashore)	(-) Tidal range and limited windows for execution; narrow channel; beach obstacles (+) Limited defenses	(+) Suitable beaches (-) Limited road network out of Kunsan	(+) East coast offers better beaches / hydrography (-) Taebaek Mountains inhibit eastward movement	Sequence landings to take advantage of tidal windows; prefabricate scaling ladders to overcome seawalls
<b>Surprise</b> (best achieves operational surprise)	(+) Unexpected location	(-) Easier to anticipate	(+) Unexpected location	None
<b>Fires</b> (maximizes ground, surface, and aviation fires)	(-) Reliance on carrier aviation; narrow channel impedes NGFS	(+) Easier to support with land based aviation	(-) Reliance on carrier aviation	Dedicate all CVs and CVEs to support the landings; conduct surface recon-in-force with DDs on D-1

- Perform COA comparison.
  - Evaluate each friendly COA against established evaluation criteria and determine that COA's advantages and disadvantages with respect to those criteria.
  - After evaluating each COA to the evaluation criteria, compare the COAs to each other based on the identified advantages and disadvantages.
  - Planners then decide upon which COA to recommend to the commander for selection.
- Review COAs.
  - Upon completion of the advantages and disadvantages summary, the COAs should be reviewed to determine whether any of the disadvantages of a COA can be overcome, without losing COA distinguishability or deviating from commander's planning guidance. Include proposed modifications in the COA comparison matrix.
- Make final test for validity.

- Present COA decision brief.
  - Use your command's approved briefing format
- State commander's decision.
  - The Commander may choose to:
    - Select a COA without modification
    - Select a COA with modification
    - Select a new COA by combining elements of multiple COAs
    - Select none of the COAs and have the OPT start over with Mission Analysis and COA development as required
      - Analyze any new, combined or modified COA (time permitting)
- Finalize synchronization matrix.
- Develop the Concept of Operations (CONOPS).
  - The CONOPS is a written summary of the approved COA based on the synchronization matrix, the COA sketch and statement, and any other current planning products. It clearly and concisely express what the commander intends to accomplish and how it will be done using available resources
  - The CONOPS includes:
    - Narrative description of the operation and its objectives
    - Graphics (OPAREAS, control measures, etc.)
    - Synch matrix and DST/DSM
    - Task organization and command relationships
    - Supporting concepts and schemes (e.g., sustainment, fires)
    - Risk assessment matrix with controls

## OUTPUTS

- COA Decision.
- Synchronization matrix.
- CONOPS.
- Decision Support Template.
- Decision Support Matrix.
- Updated IPOE products.
- WARNORD.

## **NPP Step Five: Directive Development**

The purpose of the directive development step of the NPP is to translate the commander's decisions from previous steps into oral, written, or graphic communication sufficient to guide implementation and promote initiative by subordinates. The directive development step produces either a plan or order, depending on the nature of the planning.

- A plan is prepared in a deliberate manner in anticipation of operations and normally serves as the basis for an order.
- An order is a written or oral communication that directs actions and focuses a subordinate's tasks and activities toward accomplishing the mission.

### **INPUTS**

- Mission statement
- Commander's intent
- CONOPS, including supporting concepts/ schemes and Synchronization matrix
- Task organization
- Staff estimates
- Assessment concept
- Updated IPOE products
- DST/DSM
- Risk Assessment Matrix
- CCIRs
- Identified branches
- WARNORD
- Existing plans, SOPs, etc.
- Directive Development guidance

### **ORDER/PLAN CHARACTERISTICS**

- **Clarity:** Use accurate doctrinal terms and acronyms; use UJTL, UNTL, and DOD dictionary; list term with acronym in ( ) when first used
- **Brevity:** Concise words, sentences, paragraphs, do not sacrifice completeness
- **Authoritative:** Affirmative expression, written in present tense, no passive voice
- **Simplicity:** Eliminate possible misunderstanding
- **Flexibility:** Leaves room for adjustment if unexpected conditions arise
- **Timeliness:** Allow adequate planning and preparation time for subordinates
- **Completeness:** All information required for execution
- **Established organization:** Clearly defined command and support relationships



## PROCESS

- Develop base paragraphs (SMEAC)

**The following format is for an Operations Order. Refer to NWP 5-01 for formats for other types of plans, order, annexes and appendices.**

**Task organization:** List and describe the organization of forces available to the JFMCC as of the date of issuance of the order. For units not yet attached, list the time that attachment is effective.

### **Situation.**

The situation paragraph is the JFMCC commander's summary of the general situation and ensures that subordinates understand the background for planned OPS. The situation paragraph should be limited to those concerns that are relevant to the JFMCC and the subordinate Task Forces. Additionally, the situation paragraph is not just an intelligence summary, although much of the information is derived from intelligence products. It should clearly explain the relevant factors of the current situation that are likely to affect decision making by commands tasked with executing the directive. Do not just cut and paste the higher headquarters' situation paragraph.

- General. Describe the general conditions of the Operational Environment that impact the operation.
- Enemy forces.
  - Summarize the enemy situation in the Area of Operations.
  - Identify the enemy's objectives and end state.
  - Identify enemy forces and appraise their general capabilities.
  - Describe the enemy's current disposition, location, and strength.
  - State the enemy's strategic and operational centers of gravity and the associated critical capabilities, critical requirements, and critical vulnerabilities.
  - List probable enemy COAs (most likely and most dangerous).
  - Identify known or potential terrorist threats within the Area of Operations.
- Friendly forces.
  - State the JFMCC center(s) of gravity and the associated critical capabilities, critical requirements, and critical vulnerabilities.
  - Higher Headquarters mission and commander's intent.
  - Missions of adjacent units. Identify and state the missions of adjacent units (other components of the JTF, allies/partner forces operating in or adjacent to the Area of Operations) and other units whose actions have a significant impact on the JFMCC.

- Interagency, international organizations, and NGOs. Identify and state the objectives or goals and primary tasks of those non-DOD organizations that have a significant role within the Area of Operations.
- Civil considerations. Describe the critical aspects of the civil situation that impact operations.
- Attachments and detachments. List units attached to or detached from the JFMCC. State when each attachment or detachment is effective if different from the effective time of the order.
- Assumptions. List any remaining assumptions that were used in the development of the COA that have not been proven as facts or disproven.
- Operational limitations. List constraints and restraints identified during planning.

**Mission:** State the approved JFMCC mission statement.

### **Execution**

This section is the centerpiece of the plan or order and describes how the commander intends to accomplish the mission.

- Commander's intent. State the approved JFMCC commander's intent.
- Concept of Operations. A concise, narrative description of how the operation will be conducted in order to accomplish the mission. In a multi-phased operation, each phase has its own sub-paragraph.
  - Start with the phase commencement conditions, "this Phase begins when [friendly condition, enemy condition, and environment condition]."
  - The next section is a narrative paragraph that describes what JFMCC intends to achieve in the Phase. Begin with the task force designated as the main effort and the decisive action that the main effort will execute, then describe the sequence of actions that JFMCC forces will use to achieve the end state. Consequently, after listing the main effort, describe, in chronological sequence, supporting actions and key shaping actions that the other task forces will conduct. You do not need to list every task that each subordinate force will conduct; focus on the most significant events which paint a clear and coherent picture of JFMCC actions in each phase.
  - End the sub-paragraph for each phase with the JFMCC end conditions, the friendly, enemy and environmental criteria that must be achieved to end each phase and commence the next phase. This 'transition criteria' must address the friendly situation achieved by the actions taken, the condition of the enemy based on friendly actions in the Phase, and a description of the military environment that has been created based on friendly force action. When writing phase transition criteria, the ending conditions of one phase are the exact starting conditions of the following phase or stage.

**Best practice: Do not address command relationships in the Concept of Operations. Command Relationships, including supporting command relationships, are addressed in paragraph 5.**

- Scheme of maneuver. Describe the employment of maneuver units in accordance with the Concept of Operations.

**Best practice: It is possible that your Concept of Operations sub-paragraph may include all of the significant maneuvers of JFMCC forces. If it does, there is no need to include a separate Scheme of Maneuver**

- Concept of intelligence. Describe how the commander envisions intelligence supporting the planned operation. Include the priority of effort to situation development, targeting, and assessment. State the priority of intelligence support to units and areas. Include the primary reconnaissance objectives/Named Areas of Interest.
- Scheme of fires. Describe how the commander intends to use fires (lethal and nonlethal) to support the planned operation. State the operational level fire support tasks and objectives and how those tasks support the rest of the operation. State the priorities for, allocation of, and restrictions on fires.
- Concept of protection. Describe how the commander envisions protection supporting the planned operation. Include the priorities of protection by mission area and identify those assets/platforms that the Commander identifies as high value units/high value air assets. Address security for bases, ports, critical infrastructure, force health protection, and protection for civilians.
- Concept of Information Operations. Describe how the commander visualizes executing Information Operations, and how it will support the command's operational mission. Summarize the concepts for supervision and termination of Information Operations.

**Best practice: Since the above listed concepts and schemes will be further extrapolated in Annexes and Appendices, the information contained in the concept and schemes paragraphs of the base order should be higher level and information that everyone, or most everyone in the force would need to know or benefit from, regardless of warfare or platform specialty.**

- **Assessment.** Describe the priorities for assessment and identify the Measures of Effectiveness used to assess end state conditions and objectives.
- **Tasks to subordinate and supporting units.** State the tasks and purposes assigned to each subordinate or supporting unit by phase of the operation. Use a separate subparagraph for each unit. Ensure tasks use the tasks from the Universal Joint Task List or Universal Naval Task List as much as possible. Resort to plain language when tasks are not covered in appropriate lists.

### **Writing tasks and purposes**

- Use UJTL, UNTL or other appropriate task list
- Tasks should come from the synch matrix
- Tasks can be carried over from one phase to the next
- Tasks are present tense, active voice, and directive
- Focus on the VERB for the task; does it mean what you want it to?
- Purposes explain why a unit is executing a task; what are they trying to accomplish?
- Purposes nest with your objectives and effects (objectives - > effects -> tasks)
- Purposes follow from Commander's intent and the purpose portion of the mission statement
- Purposes are usually more important than the task
- Conditions determine when a subordinate executes a task:
  - At time (NLT, NET, etc.)...
  - At condition ...
  - On Order...
  - Be Prepared To...
  - No Condition

**Best practice: A good technique is to list the tasks in the chronological order in which a Task Force is expected to execute them. If tasks occur simultaneously or throughout the phase, list them in priority order with decisive action tasks first, followed by supporting action tasks and then shaping action tasks.**

- **Coordinating instructions.** List the instructions applicable to the entire force or two or more elements of the force that are necessary for proper coordination of the operation.

- Time or condition when the OPORD becomes effective. Tentative dates for D-day and H-hour are usually given in this subparagraph.
- CCIRs.
- Areas of Operation and fire support coordination measures.
- Airspace coordinating measures. List critical airspace coordinating or control measures here.
- ROE.
- Risk-reduction control measures. State measures specific to this operation not included in unit SOPs. They may include mission-oriented protective posture, operational exposure guidance, and fratricide prevention measures.
- Personnel recovery coordination measures.
- Environmental considerations.
- Policy guidance for the protection of civilians and directives for convening investigations into incidents causing civilian casualties.
- Other relevant coordinating instructions.

### **Administration and Logistics.**

- Concept of sustainment. Describe the concept of sustainment, including priorities of sustainment by unit, area, or assigned mission. Briefly summarize the overall operation, this time from the Logistics Readiness Center/N4 point of view.
- Material and services. List material and services for supply, maintenance, transportation, construction, and allocation of labor.
- Medical services. List plans and policies for hospitalization and evacuation of military and civilian personnel.
- Personnel. List unit strengths, replacements, and personnel policies and procedures, including those pertaining to civilians and detainees/prisoners of war.
- Civil Affairs. Describe control of civil populations, refugees, and related matters.
- Public Affairs guidance.

### **Command and Control**

- Command relationships. State the command relationship (OPCON or TACON) that each subordinate commander has over forces listed in the Task Organization section of the order. Identify supporting relationships between subordinate commanders. Include any shifts of command relationships that may take place as the operation progresses from one phase to another (New CTF created, change in designation of the commander of a Task Force, shift in TACON over a force / unit (e.g. transfer of assets between TFs.)
- Location of commander. State the location(s) of the commander and the second-in-command throughout the operation.
- Succession of command.
- Liaison requirements.

- Command, control, and communications. State information about pertinent command, control, and communications nets; operating procedures; recognition and identification procedures; electronic emission constraints; etc.
- Reports. List reports not covered in SOPs.
- Any other C2 items necessary.

- |   |
|---|
| <ul style="list-style-type: none"> <li>○ <b>Writing tips</b> <ul style="list-style-type: none"> <li>• <b>Be CLEAR and DIRECT</b></li> <li>• <b>Use third person, active voice (except Commander's intent), present tense</b></li> <li>• <b>Be directive</b></li> <li>• <b>Proper grammar, spelling, etc.</b></li> </ul> </li> </ul> |
|---|

- Develop appropriate annexes, appendices, and tabs
- Internal reconciliation of the directive.
  - The planning team conducts a detailed review of the entire directive to ensure that all elements are accurate, coherent, complete, and in agreement.
- Cross-walk directive to synchronize with other commands' directives
  - The crosswalk step is a review of the directive to ensure it is consistent with senior, adjacent, and subordinate commands.
- Commander approves and issues the directive.

## OUTPUTS

- Approved plan or order
- Refined / updated:
  - IPOE
  - Staff estimates
- Operational assessment plan (to measure progress during execution)
- Updated decision support tools (DST, DSM, etc. that match approved directive.)
- Operational directives (e.g., OPGENS, OPTASKs, etc.)
- Outline FRAGORDs

### ***Types of Orders***

**Alert Order:** Normally associated with a crisis, provides essential guidance, and directs planning after the directing authority has approved a military COA, but has not yet authorized execution.

**Planning Order:** Provides essential planning guidance to develop, adapt, or refine an existing plan due to emergent changes in the environment.

**Warning Order:** Preliminary notice of an order or action to follow and will initiate the development and evaluation of military COAs

**Deployment Order:** A directive for the deployments of forces for operations or exercises or that authorizes the transfer of forces between combatant commanders, Services, and Department of Defense agencies and specifies the authorities the gaining combatant commander will exercise over the specific forces to be transferred.

**Operation Orders:** A directive issued by a commander to subordinate commanders for the purpose of effecting the coordinated execution of an operation.

**Prepare to Deploy Order:** An order to a force provider to have a unit ready and to deploy within a specified response time.

**Fragmentary Order:** An abbreviated operation order issued as needed to change or modify an order or to execute a branch or sequel.

**Execute Order:** An order issued by CJCS, at the direction of the SecDef, to implement a decision by the President to initiate military operations.

**Tasking Order:** No formal definition, but the format exists. Primarily used to narrowly task a force to take action outside of an operation or exercise.

## **NPP Step Six: Transition**

Transition is the orderly handover of a plan or order to those tasked with execution of the operation or across planning horizons. It provides staffs with the situational understanding and rationale for key decisions necessary to ensure that there is a coherent transition from planning to execution.

### **INPUTS**

- Approved base directive
- Synchronization matrix
- Updated decision support tools (DST, DSM, etc.)
- ROE
- Risk assessment matrix
- Refined IPOE
- Operational Assessment plan
- Staff estimates

### **PROCESS**

- The transition of a plan can be as simple as a brief within the MOC or as complex as a full force rehearsal. It is possible that more than one transition event will be required to advance understanding of a plan by subordinates and adjacent components. Careful consideration must be given to the location of transition events. The selected location should maximize opportunity for attendance.
- Determine the intended audience and focus (internal/external) for the transition event(s) and select, coordinate and conduct the type of transition event(s) in order to best achieve transition goals.
- - Types of transition events:
    - Brief. A brief is the least resource- and time-intensive method to communicate a plan across echelons of command.
      - Transition Brief: Internal for staff and/or external to subordinates and adjacent components
      - Confirmation Brief: Delivered by subordinate commanders to their higher HQ
    - Rehearsal of Concept Drill (ROC drill). This technique is used by the commander and staff to facilitate understanding of a plan throughout all levels of the command and to gain insight into seams and points of friction within a plan. ROC drills may be conducted internally or externally and may be used in lieu of a confirmation brief. The ROC drill may be as simple as gathering the OPT around a chart for a walk-through of a CONOPS or as complex as a multiple component rehearsal of an entire plan.



- Simulation. A simulation is time and resource-intensive, requiring dedicated support personnel and technology. For these reasons, simulations are often conducted outside of the command HQ.
- Partial force rehearsal. A partial force rehearsal uses a portion the maritime force (commanders, staffs and hardware units) to rehearse the selected COA.
- Full force rehearsal. A full force rehearsal is the most comprehensive but also the most resource-intensive. This technique involves all participants (commanders, staffs, and hardware units) rehearsing the selected COA.
- Transition staff estimates to running estimates

## **OUTPUTS**

- Formal transition from planning to execution
  - Subordinate Commanders and staffs prepared to execute the order and possible branch plans
  - Running estimates developed
- Operational assessment guidance refined

## **NPP in a Time-Constrained Environment**

All staffs should be able to produce a sound plan in a time-constrained environment. Omitting steps of the NPP, however, is not the solution. Anticipation, organization, preparation, and (most importantly) the commander's direct involvement are the keys to success.

### **TECHNIQUES FOR PLANNING IN A TIME-CONSTRAINED ENVIRONMENT**

- Involve the commander / seek detailed guidance
- Insist on experienced staff and liaison officers
- Create a plan to plan
- Apply the NPP with judgment (i.e., compress or conduct steps concurrently)
- Leverage parallel and collaborative planning
- Use existing analysis, planning products, and guidance
- Deliver the required directive on time

### **HOW TO SAVE TIME IN MISSION ANALYSIS**

- Request specific planning guidance from the commander
- Perform Mission Analysis sub-steps concurrently in smaller breakout groups
- Conduct less formal briefs (i.e. desktop brief to commander)
- Issue verbal warning orders

### **HOW TO SAVE TIME IN COA DEVELOPMENT**

- Develop the COAs with a small team and the commander
- Limit the number of COAs to be developed
- Develop COAs concurrently

### **HOW TO SAVE TIME IN COA ANALYSIS**

- Conduct a less formalized, compressed war game
- Involve the commander to focus staff efforts
- Focus on specific critical events, essential tasks, or specific areas
- Wargame fewer COAs; possibly one directed COA
- Wargame fewer ECOAs, or limited the number of enemy reactions.
- Emphasize the use of recorders to capture results

### **HOW TO SAVE TIME IN COA COMPARISON AND DECISION**

- Limit the evaluation criteria/governing factors
- Involve the commander to expedite decision-making
- Brief from the advantages and disadvantages matrix

### **HOW TO SAVE TIME IN DIRECTIVE DEVELOPMENT**

- Develop / write the order throughout the process
- Require early staff and subordinate involvement

### **HOW TO SAVE TIME DURING TRANSITION**

- Schedule the transition brief and attendees at the start of the process
- Determine how the plan will transition at the start of the process
- Determine up front the planning products that will be transitioned
- Consider the transition as an opportunity to rehearse the plan

# ACRONYMS

See DOD Dictionary and NTRP 1-02 for additional joint and Navy doctrinal acronyms and definitions, and doctrinal convention for capitalization.

A2	Anti-access
AADC	Area Air Defense Commander
AADP	Area Air Defense Plan
AAW	Antiair Warfare
ACA	Airspace Control Authority
ACSA	Acquisition and Cross-Servicing Agreement
AD	Air Defense; Area Denial
ADCON	Administrative Control
AEF	Air Expeditionary Force
AETF	Air Expeditionary Task Force
AFSB	Afloat Forward Staging Base
AIS	Automatic Identification System
ALERTORD	Alert Order
ALOC	Air Line of Communication
ALSA	Air Land Sea Application (Center)
AMEMB	American Embassy
AO	Area of Operations
AOA	Amphibious Objective Area
AOC	Air Operations Center
AOI	Area of Interest
AOR	Area of Responsibility
APOD	Aerial Port of Debarkation
APOE	Aerial Port of Embarkation
ARG	Amphibious Ready Group
ASM	Anti-Ship Missile; Air-To-Surface Missile
ASW	Antisubmarine Warfare
AT/FP	Antiterrorism/Force Protection
ATO	Air Tasking Order
B2C2WG	Boards, Bureaus, Centers, Cells, And Working Groups Note: generally replaced by Functional Teams (FTs) (i.e., centers and cells), and Cross-Functional Teams (CFTs) (i.e., working groups and boards)
BDA	Battle Damage Assessment
BMD	Ballistic Missile Defense
BPT	Be Prepared To
C2	Command and Control
CA	Civil Affairs
CAL	Critical Asset List

CAP	Combat Air Patrol
CAS	Close Air Support
CaS	Collaboration at Sea (website)
CATF	Commander, Amphibious Task Force
CBRNE	Chemical, Biological, Radiological, Nuclear, And High-Yield Explosives
CC	Critical Capability
CCDR	Combatant Commander
CCIR	Commander's Critical Information Requirement
CCMD	Combatant Command
CCOI	Critical Contact of Interest
C-day	Unnamed day on which a deployment operation commences
CDCM	Coastal Defense Cruise Missile
CENTRIXS	Combined Enterprise Regional Information Exchange System
CFACC	Combined Force Air Component Commander
CFLCC	Combined Force Land Component Commander
CFMCC	Combined Force Maritime Component Commander
CFSOCC	Combined Force Special Operations Component Commander
CFT	Cross-Functional Team (i.e., OPTs, working groups and boards)
CI	Counterintelligence
CIE	Collaborative Information Environment
CJCS	Chairman of The Joint Chiefs of Staff
CJCSI	Chairman of The Joint Chiefs of Staff Instruction
CJCSM	Chairman of The Joint Chiefs of Staff Manual
C/JFMCC	Combined/Joint Force Maritime Component Commander
C/JSOTF	Combined/Joint Special Operations Task Force
C/JTF	Combined/Joint Task Force
CJTF	Combined Joint Task Force (NATO); Commander, Joint Task Force
CLF	Commander, Landing Force
CMO	Civil-Military Operations
CMOC	Civil-Military Operations Center
CNO	Chief of Naval Operations;
CO	Cyberspace Operations
COA	Course of Action
COCOM	Combatant Command (command authority)
COG	Center of Gravity
COI	Contact of Interest

COIN	Counterinsurgency
COMAFFOR	Commander, Air Force Forces
COMARFOR	Commander, Army Forces
COMCAM	Combat Camera
COMMARFOR	Commander, Marine Corps Forces
COMNAVFOR	Commander, Navy Forces
CONOPS	Concept of Operations
CONPLAN	Concept Plan; Operation Plan in Concept Format
COP	Common Operational Picture
COPS	Current Operations (Cell)
COS	Chief of Staff
CR	Critical Requirement
CRAF	Civil Reserve Air Fleet
CS	Combat Support
CSAR	Combat Search and Rescue
CSG	Carrier Strike Group
CT	Counterterrorism
CUB	Commander's Update Brief
CV	Critical Vulnerability
CWC	Composite Warfare Commander
DAL	Defended Asset List
DART	Disaster Assistance Response Team
DC	Dislocated Civilian
DCO	Defensive Cyberspace Operations
D-day	Unnamed day on which a particular operation commences
DEPORD	Deployment Order
DHS	Department of Homeland Security
DIA	Defense Intelligence Agency
DIM	Daily Intentions Message
DIME	Diplomatic, Information, Military, And Economic
DIRLAUTH	Direct Liaison Authorized
DISA	Defense Information Systems Agency
DOD	Department of Defense
DODD	Department of Defense Directive
DOE	Department of Energy
DOJ	Department of Justice
DON	Department of The Navy
DOS	Department of State
DOT	Department of Transportation
DOTMLPF-P	Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities and Policy

DP	Decisive Point; Displaced Person
DPG	Defense Planning Guidance
DR	Disaster Relief; Disaster Response (USCG)
DRAW-D	Defend, Reinforce, Attack, Withdraw, Delay
DRRS	Defense Readiness Reporting System
DSCA	Defense Support of Civil Authorities
EA	Executive Agent; Electromagnetic Attack
EABO	Expeditionary Advanced Base Operations
EAP	Emergency Action Plan
EOA	Enemy Course of Action
EOG	Enemy Center of Gravity
E-Day	Landing Forces Begins to Embark
EEZ	Exclusive Economic Zone
EMIO	Expanded Maritime Interception Operations
EOD	Explosive Ordnance Disposal
ESG	Expeditionary Strike Group
EW	Electromagnetic Warfare
EXORD	Execute Order
F2T2EA	Find, Fix, Track, Target, Engage, Assess
FARP	Forward Arming and Refueling Point
FCC	Functional Combatant Commander; Fleet Command Center
FDR	Foreign Disaster Relief
FFIR	Friendly Force Information Requirement
FHA	Foreign Humanitarian Assistance
FHP	Force Health Protection
FID	Foreign Internal Defense
FOB	Forward Operating Base
FON	Freedom of Navigation
FONOPS	Freedom of Navigation Operations
FOPS	Future Operations (cell)
FPC	Future Plans Cell
FRAGORD	Fragmentary Order (aka FRAGO for USA, USMC and NATO)
FRTTP	Fleet Readiness Training Plan; Fleet Response Training Plan
FT	Functional Team (i.e., centers and cell)
FULLCOM	Full Command (NATO)
FYDP	Future Years Defense Program
GCC	Geographic Combatant Commander
GCCS	Global Command and Control System
GCCS-J	Global Command and Control System–Joint
GCCS-M	Global Command and Control System–Maritime

GOPLAT	Gas-Oil Platform
HA	Humanitarian Assistance
HA/DR	Humanitarian Assistance/Disaster Relief
H-hour	Specific hour on D-day when a particular operation commences
HHQ	Higher Headquarters
HN	Host Nation
HNS	Host-Nation Support
HOC	Humanitarian Operations Center
HPT	High-Payoff Target
HSPD	Homeland Security Presidential Directive
HSS	Health Service Support
HUMINT	Human Intelligence
HVA	High-Value Asset
HVT	High-Value Target
I&W	Indications and Warning
IA	Information Assurance; Individual Augmentee
IADS	Integrated Air Defense System
IAMD	Integrated Air and Missile Defense
ICC	Intelligence Coordination Center (USCG)
ID	Identification
IDP	Internally Displaced Person
IE	Information Environment
IGO	Intergovernmental Organization
IM	Information Management
IMINT	Imagery Intelligence
IMO	Information Management Officer; International Maritime Organization
IO	Information Operations
IOC	Initial Operational Capability
IOT	In Order To
IPB	Intelligence Preparation of The Battlespace
IPOE	Intelligence Preparation of The Operational Environment
IPR	In-Progress Review
IRC	Information Related Capability
ISB	Intermediate Staging Base
ISO	In Support Of
ISR	Intelligence, Surveillance, And Reconnaissance
ISSA	Inter-Service Support Agreement
IW	Irregular Warfare
IWC	Information Operations Warfare Commander



JADOCs	Joint Automated Deep Operations Coordination System
JAOC	Joint Air Operations Center
JCMOTF	Joint Civil-Military Operations Task Force
JDEIS	Joint Doctrine, Education, and Training Electronic Information System
JEMSO	Joint Electromagnetic Spectrum Operations
JFACC	Joint Force Air Component Commander
JFC	Joint Force Commander
JFE	Joint Fires Element
JFLCC	Joint Force Land Component Commander
JFMCC	Joint Force Maritime Component Commander
JFSOCC	Joint Force Special Operations Component Commander
JIACG	Joint Interagency Coordination Group
JIATF	Joint Interagency Task Force
JIOC	Joint Intelligence Operations Center
JIPOE	Joint Intelligence Preparation of The Operational Environment
JIPTL	Joint Integrated Prioritized Target List
JISE	Joint Intelligence Support Element
JLOTS	Joint Logistics Over-The-Shore
JMET	Joint Mission-Essential Task
JMETL	Joint Mission-Essential Task List
JMISTF	Joint Military Information Support Task Force
JOA	Joint Operations Area
JOC	Joint Operations Center
JOPES	Joint Operation Planning and Execution System
JP	Joint Publication
JPEC	Joint Planning and Execution Community
JPG	Joint Planning Group
JPP	Joint Planning Process
JRSOI	Joint Reception, Staging, Onward Movement, And Integration
JSCP	Joint Strategic Campaign Plan
JSOTF	Joint Special Operations Task Force
JTCB	Joint Targeting Coordination Board
JTF	Joint Task Force
JTL	Joint Target List
JWAC	Joint Warfare Analysis Center
KM	Knowledge Management
KIM	Knowledge and Information Management
KMO	Knowledge Management Officer

KMP	Knowledge Management Plan
L-hour	Specific hour on C-day at which a deployment commences
LMSR	Large, Medium-Speed Roll-On/Roll-Off (ship)
LNO	Liaison Officer
LOAC	Law of Armed Conflict
LOC	Line of Communications
LOGCON	Logistic Control (NATO)
LOO	Line of Operation
LOTS	Logistics Over-The-Shore
LRC	Logistics Readiness Center
MAAP	Master Air Attack Plan
MAG	Marine Aircraft Group
MAGTF	Marine Air-Ground Task Force
MARAD	Maritime Administration
MARLO	Marine Liaison Officer
MARSUPPLAN	Maritime Supporting Plan
MASINT	Measurement and Signature Intelligence
MCC	Maritime Component Commander; Marine Component Commander
MCCDC	Marine Corps Combat Development Command
MCDP	Marine Corps Doctrine Publication
MCM	Mine Countermeasures
MCOO	Modified Combined Obstacle Overlay
MCPP	Marine Corps Planning Process
MCT	Marine Corps Task (UNTL)
MCTL	Marine Corps Task List (UNTL)
MCWP	Marine Corps Warfighting Publication
MDA	Maritime Domain Awareness
M-day	Unnamed day on which full mobilization commences
MDMP	Military Decision Making Process (US Army)
MDT	Maritime Dynamic Target
MECB	Maritime Effects Coordination Board
MEF	Marine Expeditionary Force
MESF	Maritime Expeditionary Security Force
MET	Mission-Essential Task
METL	Mission-Essential Task List
METOC	Meteorological and Oceanographic
MEU	Marine Expeditionary Unit
MHQ	Maritime Headquarters
MILDEC	Military Deception
MIO	Maritime Interception Operations; Maritime Interdiction Operations (NATO)

MISO	Military Information Support Operations (formerly PSYOP)
MIST	Military Information Support Team
MIW	Mine Warfare
MNF	Multinational Force
MOC	Maritime Operations Center
MOE	Measure of Effectiveness
MOG	Maximum (Aircraft) On Ground
MOP	Measure of Performance
MOPP	Mission-Oriented Protective Posture
MOTR	Maritime Operational Threat Response
MPA	Maritime Patrol Aircraft
MPG	Maritime Planning Group
MPRA	Maritime Patrol and Reconnaissance Aircraft
MPSRON	Maritime Pre-Positioning Ships Squadron
MSC	Military Sealift Command; Major Subordinate Command
MSCA	Military Support to Civil Authorities
MSCP	Maritime Security Cooperation Plan
MTCB	Maritime Targeting Coordination Board
NAI	Named Area of Interest
NALE	Naval and Amphibious Liaison Element
NATO	North Atlantic Treaty Organization
NAVFOR	Navy Forces
NCAGS	Naval Cooperation and Guidance for Shipping
NCC	Navy (Naval) Component Commander
NCHB	Navy Cargo Handling Battalion
N-day	Day an active unit is notified for deployment or redeployment
NDLS	Navy Doctrine Library System
NECC	Navy Expeditionary Combat Command
NEO	Noncombatant Evacuation Operation
NETOPS	Network Operations
NGFS	Naval Gunfire Support
NGO	Nongovernmental Organization
NIOC	Navy Information Operations Command
NMET	Navy Mission-Essential Task
NMETL	Navy Mission-Essential Task List
NMIST	National Military Intelligence Support Team
NMS	National Military Strategy
NMIC	National Maritime Intelligence Center
NNWC	<b>Naval Network Warfare Command</b>
NOC	Naval Operating Concept

NPP	Navy Planning Process
NSC	National Security Council
NSFS	Naval Surface Fire Support
NSL	No-Strike List
NSMS	National Strategy for Maritime Security
NSPD	National Security Presidential Directive
NSS	National Security Strategy
NSWTG	Naval Special Warfare Task Group
NTA	Navy Tactical Task (UNTL)
NTTL	Navy Tactical Task List (UNTL)
NTPP	Navy Tactics, Techniques, And Procedures
NWL	Navy Warfare Library
NWP	Navy Warfare Publication
O&M	Operation and Maintenance
OA	Operational Area
OCA	Offensive Counterair
OCHA	Office for the Coordination of Humanitarian Affairs (UN)
OCO	Offensive Cyberspace Operations
OE	Operational Environment
OFDA	Office of US Foreign Disaster Assistance (USAID)
OLW	Operational Level of Warfare
OMFTS	Operational Maneuver from the Sea
ONI	Office of Naval Intelligence
O/O	On Order
OOB	Order of Battle
OODA	Observe, Orient, Decide, Act
OPAREA	Operating Area
OPART	Operational Art
OPCOM	Operational Command (NATO)
OPCON	Operational Control
OPGEN	Operational General Message
OPLAN	Operation Plan
OPORD	Operation Order
OPSEC	Operations Security
OPT	Operational Planning Team
OSINT	Open-Source Intelligence
OTC	Officer in Tactical Command
PA	Public Affairs
PAO	Public Affairs Officer
PCC	Policy Coordination Committee
PHIBRON	Amphibious Squadron
PID	Positive Identification

PIR	Priority Intelligence Requirement
PKO	Peacekeeping Operations
PLANORD	Planning Order
PMESII	Political, Military, Economic, Social, Information, And Infrastructure
POD	Port of Debarkation
POE	Port of Embarkation; Port of Entry
POLAD	Political Advisor
PPAG	Proposed Public Affairs Guidance
PPBE	Planning, Programming, Budgeting, And Execution
PR	Personnel Recovery
QRF	Quick Reaction Force; Quick Response Force
RC	Reserve Component
RCA	Riot Control Agent
R-day	Day on which redeployment of major combat forces begins
RDD	Required Delivery Date
RFC	Request for Capabilities
RFF	Request for Forces
RFI	Request for Information
ROC	Rehearsal of Concept; Required Operational Capability
ROE	Rules of Engagement
ROMO	Range of Military Operations
RO/RO	Roll-On/Roll-Off
ROWPU	Reverse Osmosis Water Purification Unit
RRF	Ready Reserve Force
RSOI	Reception, Staging, Onward Movement, And Integration
RTL	Restricted Target List
RUF	Rules for the Use of Force
SA	Situational Awareness
SAG	Surface Action Group
SAM	Surface-To-Air Missile
SC	Security Cooperation
SCP	Security Cooperation Plan
S/CRS	Office of the Coordinator for Reconstruction and Stabilization (DOS)
SEAD	Suppression of Enemy Air Defenses
Secretary of Defense	Secretary of Defense
SIGINT	Signals Intelligence
SJFHQ	Standing Joint Force Headquarters

SLOC	Sea Line of Communications
SME	Subject Matter Expert
SMEAC	Situation, Mission, Execution, Admin and Logistics, Command and Control
SOCCE	Special Operations Command and Control Element
SOF	Special Operations Forces
SOFA	Status-Of-Forces Agreement
SOLAS	Safety of Life at Sea
SOLE	Special Operations Liaison Element
SOP	Standard Operating Procedure
SPINS	Special Instructions
SPMAGTF	Special Purpose Marine Air-Ground Task Force
SPOD	Seaport of Debarkation
SPOE	Seaport of Embarkation
SROE	Standing Rules of Engagement
SRUF	Standing Rules for The Use of Force
SSM	Surface-To-Surface Missile
STAR	Sensitive Target Approval and Review
STOM	Ship to Objective Maneuver
STW	Strike Warfare
SUW	Surface Warfare
TA	Target Acquisition; Target Audience;
TACAIR	Tactical Air
TACMEMO	Tactical Memorandum
TACOM	Tactical Command (NATO)
TACON	Tactical Control
TAI	Target Area of Interest
TBMCS	Theater Battle Management Core System
TBMD	Theater Ballistic Missile Defense
TECHINT	Technical Intelligence
TF	Task Force
TNL	Target Nomination List
TPFDD	Time-Phased Force and Deployment Data
TSC	Theater Security Cooperation
TSCP	Theater Security Cooperation Plan
TSOC	Theater Special Operations Command
TST	Time-Sensitive Target
TTP	Tactics, Techniques, And Procedures
UJTL	Universal Joint Task List
UN	United Nations
UNCLOS	United Nations Convention on The Law of The Sea
UNODIR	Unless otherwise directed
UNSCR	United Nations Security Council Resolution

UNTL	Universal Naval Task List
USAID	United States Agency for International Development
USC	United States Code
USG	United States Government
VBIED	Vehicle-Borne Improvised Explosive Device
VISA	Voluntary Intermodal Sealift Agreement
VOI	Vessel of Interest
WARNORD	Warning Order
WC	Warfare Commander
WMD	Weapons of Mass Destruction

# Maritime Staff Operators Course

## College of Maritime Operational Warfare



**U.S. NAVAL WAR COLLEGE**  
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