

Maritime Staff Reference Guide

Maritime Staff Operators Course

College of Maritime Operational Warfare
June 2021



U.S. NAVAL WAR COLLEGE
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College of Maritime Operational Warfare
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 401-841-7361 or cmow_msoc_faculty@usnwc.edu.

General info 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

OBJECTIVES AND CONCEPTS OF NAVAL WARFARE

- **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. A means to an end, not the end itself.
- **Sea Control:** The ability to prevail in time of open hostilities in an area of real or potential conflict and use that sea-space and the airspace above to accomplish mission objectives. Sea control is not an aspect of peacetime power projection. Naval forces obtain sea control through combat or the immediate threat of combat. Hence, the United States Navy's forward presence in itself is insufficient to achieve sea control. However, forward deployment of United States naval forces creates favorable conditions to obtain and then maintain sea control quickly after the start of hostilities. In practice, sea control planning requires precise articulation of the specific types of operations, their desired outcomes, and their purpose. Planners must balance the operational factors of space, time, and force to achieve the degree of sea control required to accomplish ultimate and intermediate objectives.

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 at all
- **Limited:** One side has freedom of action; other side operates at high risk
- **Contested:** Opposing sides possess roughly equal capabilities
- **Sea Denial:** The ability to deny partially or completely the enemy's use of the sea for military and commercial purposes. Sea denial is the principal objective of a weaker side. It is possible that the U.S. Navy will be forced to have sea denial as is principal strategic or operational objective depending the objectives of the joint force, the maritime resources available, and the desired end state of an operation. It is an oversimplification to say that denying the use of the sea to an opponent is the opposite of sea control. If a weaker side denies control of the sea to a stronger opponent, this does not mean that it necessarily obtains control itself. Sea control and sea denial are often complementary objectives.
 - Methods:
 - 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:** The employment of forces to destroy enemy naval forces, suppress enemy sea commerce, protect vital sea lanes, and establish local military superiority in vital sea areas.
 - Purposes:
 - Deny enemy commercial/military use of the sea
 - Ensure friendly maritime trade
 - Facilitate power projection
 - Allow landing/sustaining forces ashore
 - Protect sea-based logistics
 - Basing/Deployment Area Control:
 - Allows execution of major naval operations
 - Part of operational protection

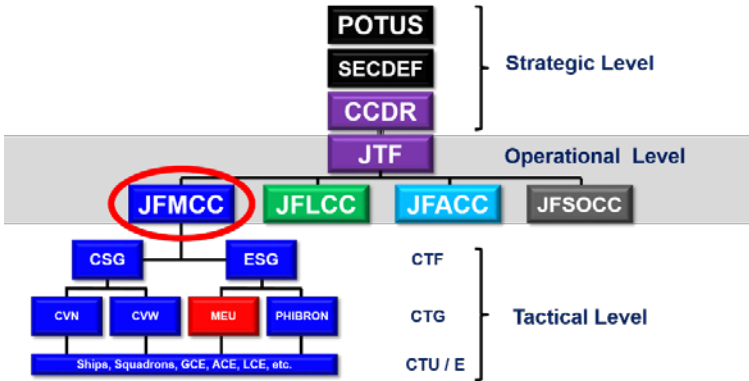
FREEDOM OF NAVIGATION / MARITIME INTERCEPTION OPERATIONS / AMPHIBIOUS OPERATIONS

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
MIO (Maritime Interception <i>[or Interdiction—NATO term]</i> Operations)	Efforts to monitor, query, and board merchant vessels in international waters to enforce sanctions against other nations, such as those in support of United Nations Security Council Resolutions, and/or prevent the transport of restricted goods
EMIO (Expanded – Maritime Interception Operations)	Broadened maritime interception operations to intercept targeted personnel or material that pose an imminent threat to the United States
MCPI (Maritime Counter Proliferation Operations)	Authorized by the SecDef, 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.

Type of Boarding	Definition
VBSS Compliant Boarding	A boarding where all of the following conditions occur: a) Suspect vessel complies with the directions of the on-scene Commander; b) No apparent passive or active resistance measures are employed; c) No intelligence available to indicate a threat.
VBSS Non-compliant Boarding	A boarding where available intelligence does not indicate a specific threat, but the vessel employs active or passive measures to prevent and/or impede the boarding phase of the operation, and any or all of the following conditions are met: a) The vessel fails to comply with OSC directions; b) Passive measures in place are intended to delay, impede, complicate, and/or deter access to spaces required for control of the vessel, but measures can be overcome by mechanical means; c) Passive resistance measures in place are intended only to delay, impede, complicate, and/or deter search and seizure of suspect vessel and can be overcome by mechanical means.
VBSS Opposed Boarding	A boarding where any or all of the following conditions are met: a) Active or passive resistance measures are in place and clearly intended to inflict serious bodily harm or death to the Boarding Team (BT); b) The suspect vessel has demonstrated intent to actively oppose the boarding by inflicting serious bodily harm or using deadly force against the BT; c) Intelligence indicates a known threat to inflict serious bodily harm or death to the BT; d) Any demonstration of hostile action, including the threatening display of weapons.

Term	Definition
Amphibious Demonstration	A type of amphibious operation conducted for the purpose of deceiving the enemy by a show of force with the expectation of deluding the enemy into following an unfavorable course of action.
Amphibious Raid	A type of amphibious operation involving swift incursion into, or temporary occupation of, an objective area followed by a planned withdrawal.
Amphibious Assault	A type of amphibious operation that involves establishing a force on a hostile or potentially hostile shore.
Amphibious Withdrawal	A type of amphibious operation involving the extraction of forces by sea in ships or craft from a hostile or potentially hostile shore.
Amphibious Support to Other Operations	A type of amphibious operation that contributes to conflict prevention or crisis mitigation. These may include operations such as security cooperation, foreign humanitarian assistance, civil support, noncombatant evacuations, peace operations, recovery operations, or disaster relief.

Levels of Warfare and Command



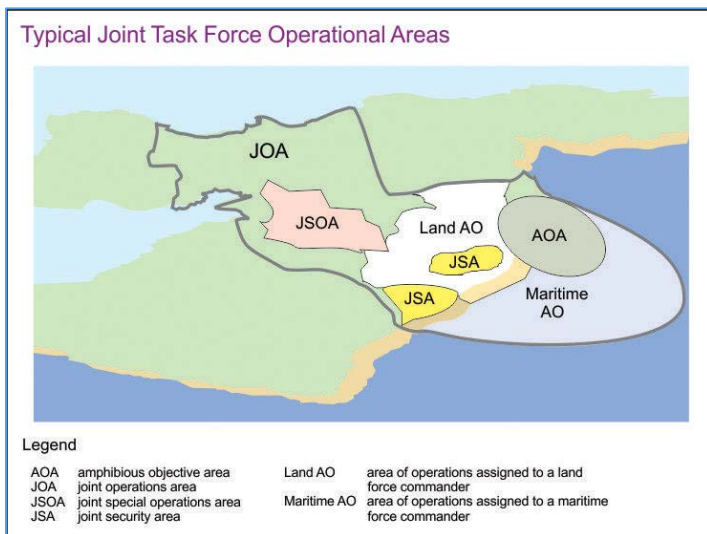
LEVELS OF WARFARE

- Determined by the nature/scope of the objective.
- No fixed limit between these levels.
- Not determined by command echelon, size of force, or area.
- **Strategic Level:** The level of warfare at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) strategic security objectives and guidance, then develops and uses national resources to achieve those objectives.
- **Operational Level:** The level of warfare at which campaigns and major operations are planned, conducted, and sustained to achieve strategic objectives within theaters or other operational areas.
- **Tactical Level:** The level of warfare at which battles and engagements are planned and executed to achieve military objectives assigned to tactical units or task forces.

LEVELS OF COMMAND

- Levels of command are clearly delineated (Chain of Command), while *levels of war* are not.

Theater Organization and Structure



- **Area of responsibility (AOR):** The geographical area associated with a Combatant Command wherein a geographic Combatant Commander has authority to plan and conduct operations.
- **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.
- **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.
- **Theater of operations (TOO):** An operational area defined by the geographic combatant commander for the conduct or support of specific military operations. A theater of operations is established primarily when the scope of the operation in time, space, purpose, and/or employed forces exceeds what a JOA can normally accommodate.
- **Joint operations area (JOA):** An area of land, sea, and airspace, defined by a geographic CDR or subordinate unified Commander, in which a JFC (normally a CJTF) conducts military operations to accomplish a specific mission.

- **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 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.
- **Joint security area (JSA):** A specific area to facilitate protection of joint bases and their connecting lines of communications that support joint operations.
- **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.

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

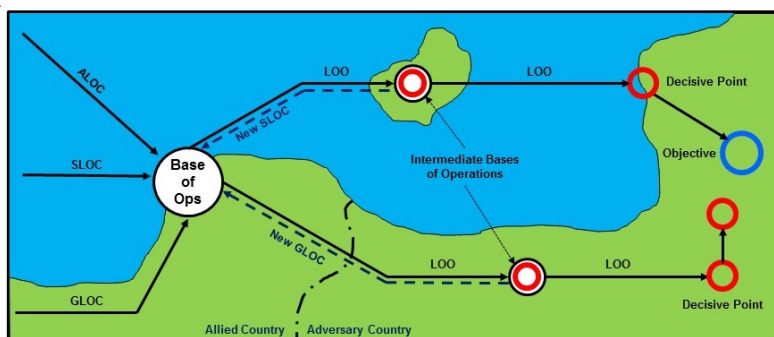
- **Positions:** Any theater contains a number of militarily important geographic positions that are, or could be, used for offensive or defensive employment of one's forces. However, to have a military value, such a position must be complemented by a corresponding effective force. Also, the value of a position is not in the position itself, but in the use that is made of it.
 - **Central position:** When a force is between two or more enemy forces
 - Advantages: Shorter LOCs; enemy can't easily concentrate forces
 - Disadvantages: Susceptible to simultaneous attack from multiple axes; security of lines of supply
 - **Exterior position:** When a force lies along the periphery of the enemy's center
 - Advantages: Can conduct attacks from multiple directions; can use movement to draw enemy from assigned objective
 - Disadvantage: Requires numerically larger and more mobile force
- **Base of Operations**
 - Encompasses a land or coastal area where forces are assembled and sustained
 - Acts as a power focus as close to the enemy as possible
 - Supports offensive and defensive operations
 - Established so advantageous lines can be created relative to objectives
 - Main base of operations usually located in own territory
 - Intermediate base of operations developed or obtained during the course of a major operation

- **Physical Objective**
 - Can be a geographic feature or a force
 - Theaters contain many physical objectives to be seized, held, controlled, or neutralized
 - Consider the nonmilitary aspects of the situation
 - Can apply to offense or defense
 - Many tactical, few operational, and usually only a single strategic objective in the course of a campaign
 - **Tactical objective:** Creates drastic change in a tactical area and contributes to a major tactical objective
 - **Operational objective:** Needs a larger force and more time to accomplish; has significant effect on the next-higher physical objective and leads to drastic change in a theater; can be fixed or mobile
 - **Strategic objective:** Drastic effect within a given theater
 - **National-strategic objective:** Results in ending enemy's organized resistance/hostilities in theater
- **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.
 - They are inherently neutral.
 - Can be permanent or transitory; geographic or force-oriented
- **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
 - Must be accessible and well-protected
 - Shifting LOOs during major operations should be avoided
 - Main LOOs extend to the main objective
 - Secondary LOOs extend to secondary objectives
- **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.
 - In general, short lines of communications are preferred to long ones; multiple lines to single ones; and interior lines to those in the rear or the flanks of one's forces.
 - **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. Longer sea lines of communications require the use of more ships. The enemy has more opportunity to attack; hence, more protection is needed.

This is especially true if the routes pass through restricted waters. The steady extension of lines of communications also requires additional bases, and they must be equipped for defense, repair, and supply.

- **Interior/Exterior Lines**

- **Interior LOCs:** Originate from a central position; allow simultaneous concentric actions from many directions against the enemy; to exploit, need sufficient space to move, ability to quickly move, and security of LOCs.
- **Exterior LOCs:** When lines of movement are separated by those of the enemy; can threaten the enemy with envelopment; to be successful on exterior lines, need superiority in combat power, good C2, and speed.



Maritime Operations Center (MOC)

The Navy employs nine Maritime Operations Centers (MOCs), responsible to nine fleet commanders. MOC organizations are embedded in the holistic fleet headquarters' organization, which not only has the responsibility to employ the fleet (a MOC organizational role), but also the responsibility to prepare and provide fleet resources (largely, a Fleet Management organizational role). MOCs are not independently resourced (manned, trained, or equipped) apart from the Fleet Management organization, and fleet personnel are often "dual-hatted" with responsibility for both MOC and Fleet Management tasks. In many cases, it is difficult to discern which billets, systems, facilities, and organizational roles are MOC or Fleet Management; some personnel prepare, provide and employ the force at the same time, but do not categorize themselves as belonging to both (or either) the fleet management organization or the maritime operations organization. In short, there is no distinction in the fleet headquarters (HQ) between the warfighter and Navy support.

To support this there are two complimentary structures, **N-codes** 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 vertical N-code structure within the fleet headquarters that organizes by function (e.g., intelligence, logistics) serves the Navy well in Fleet Management (prepare and provide the force). This N-code structure carries out fleet management responsibilities, such as administration, manning, training, and equipping, and also supplies the manpower, systems, information resources, and expertise for the MOC. However, the N-code structure's stovepipes do not easily facilitate the crosstalk needed to support a Commander during fast-paced operations to employ the force.

MOC structure: The MOC is organized by teams/organizations comprised of functional teams and cross-functional teams to employ the force. The primary functions of the MOC is to: (1) enable the commander's ability to command and control assigned forces by supporting an operational decision-making process within the HQ, and (2) to plan and coordinate operations with superior, supported, peer, subordinate and supporting commands to set the conditions for subordinates' success in support of the six core sea service capabilities: deterrence, maritime security, all domain access, sea control, power projection, and non-combat support ("smart power") operations. The MOC therefore leverages the manpower, systems, information resources, and expertise provided by the N-codes to organize and operate in two main layers: functional teams (FTs) and cross-functional teams (CFTs).

Functional Teams: The first layer which is more persistent in nature, establishes, maintains, and shares knowledge and situational awareness, and is organized into what is called 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, Sustainment and Services Cell, JOPES Cell, Assessment Cell, Comm Systems Operations 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 workcenter"). 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 supported 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. The effectiveness of a MOC organization relies on a fully cross-functional process. CFTs are comprised of OPTs, 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. The 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. This requirements-based layer produces the mission-oriented output, whereas the permanent centers produce the functional, regional-specific information that feeds an operation. While a core set of CFTs will likely be established within a MOC, the MOC's CFT

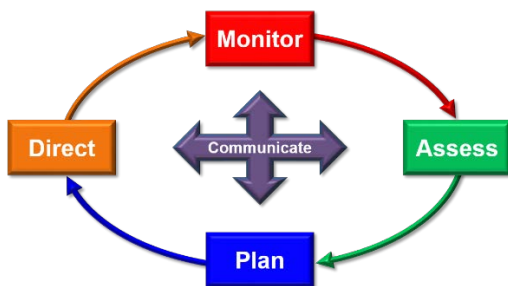
structure, organization, and staffing may vary depending on the missions, operational environment, makeup of potential adversaries, nature of the crisis (e.g., combat, humanitarian response), and the time available. Each CFT has an assigned lead and director with principal oversight responsibility. Participants can be present physically or virtually and may include members from mission partners up, down, and across the force. The specific internal relationships among the CFTs are established based on the mission. Eliminating bottlenecks and unnecessary chop chains is key to keeping pace with the tempo of operations and employment of common systems, processes, and organizations makes it easier to train and educate permanent MOC personnel and augmentees.

The MOC can be thought of as a loosely bound network spanning across and overlaying the N-code structure. While the people are typically organized by N-code, certain processes are designated to take place in functional and cross-functional teams. There are three fundamental ways the MOC construct differs from the traditional N-codes staff structure and processes:

- FTs/CFTs are overlaid on the traditional N-code structure, creating a network of people, processes, and functions.
- FTs/CFTs are managed via a battle rhythm that supports the Commander's decision cycle.
- Primary 'employ the force' functions are distinct from the administrative, support, and fleet management functions (prepare and provide the force) of the staff; however, they coexist within the staff structure.

The MOC Standardization Manual (OPNAV-M 3500.42 series) provides a baseline organization for consideration, as well as a list of those CFTs that every MOC should have.

Commander's Decision Cycle



COMMANDER'S DECISION CYCLE: The commander's decision cycle is a concept that depicts how command and staff elements determine required actions, codify them in directives, execute them, and monitor results. The commander's decision cycle has four processes and an integrating element.

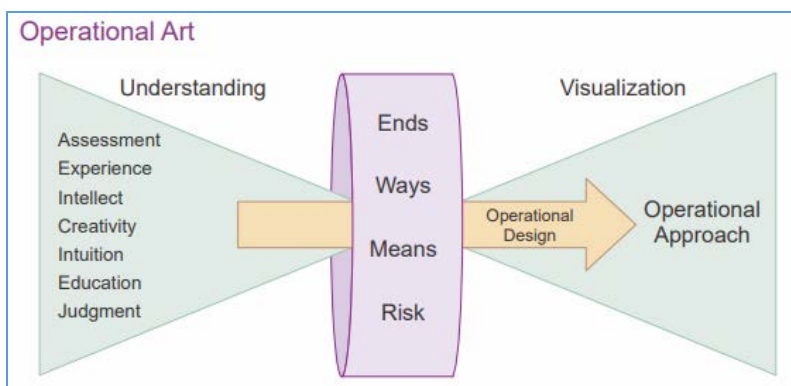
- **Assess:** Continuous process that measures the overall effectiveness of employing the force during operations.

- **Plan:** Complex problem solving and learning process that provides a direction for organization and a scheme or method of acting.
- **Direct:** A process to guide, oversee, and control the performance of units to achieve objectives.
 - Mission-type orders
 - OPGENs & OPTASKs
 - Commander's guidance and intent
 - CCIRs
- **Monitor:** Observe and check the progress of operations to verify plan accomplishment, identify deviations (branch plans), and initiate corrective actions if required.
- **Communicate:** Exchange and transmit information, and ensure that it is received and understood by:
 - Higher headquarters, components, and subordinates
 - External stakeholders (e.g., DoS, NGOs)
 - Coalition partners

PLANNING HORIZONS: The Commander has a decision cycle at all three planning/event horizons; the faster (near term) to the slower (long term). The MOC conducts assess-plan-direct-monitor across three event horizons simultaneously.

Future Plans (FuPlans)	Future Operations (FOPS)	Current Operations (COPS)
<ul style="list-style-type: none"> • Operational Focus is on "What's Next" • Next Phase of the Operation (Sequels) 	<ul style="list-style-type: none"> • Operational Focus is on "What If" • Contingency / Branch Planning) 	<ul style="list-style-type: none"> • Operational Focus is on "What Is" • Directs the Execution of the Operation

Operational Art and Operational Design



OPERATIONAL ART

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.

- Develops **Ways** that allow the achievement of **Ends** using available **Means** with acceptable **Risk**
- Synchronizes **Forces** in **Time** and **Space**
- Links tactical actions to strategic goals

Ends, Ways, Means, Risk

Operational art is the method commanders use to visualize how best to efficiently and effectively employ military capabilities to accomplish their mission by answering the following questions:

What is the current state of the Operational Environment (OE)?

(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 (state of the OE)?

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

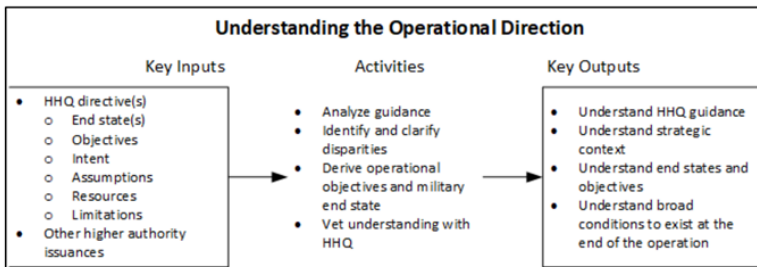
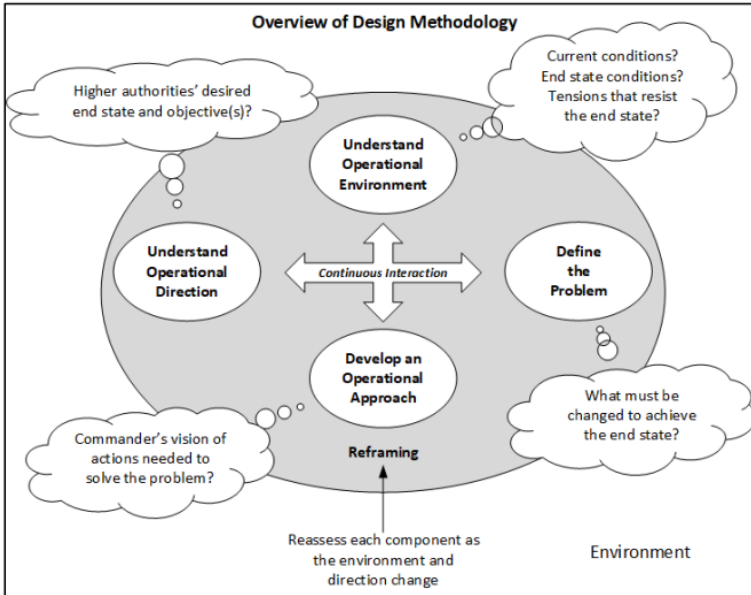
(Means) What resources are required to accomplish that sequence of actions?

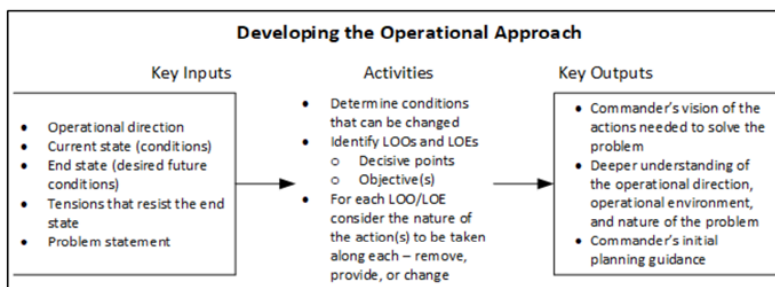
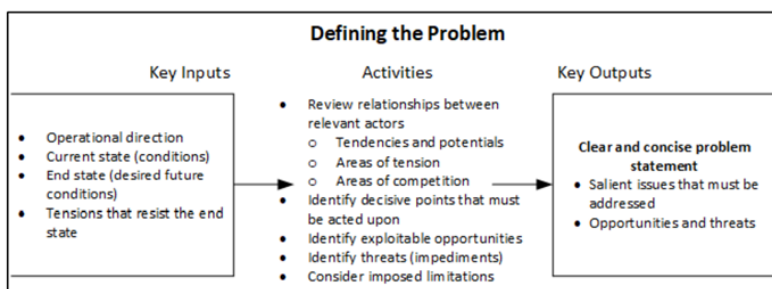
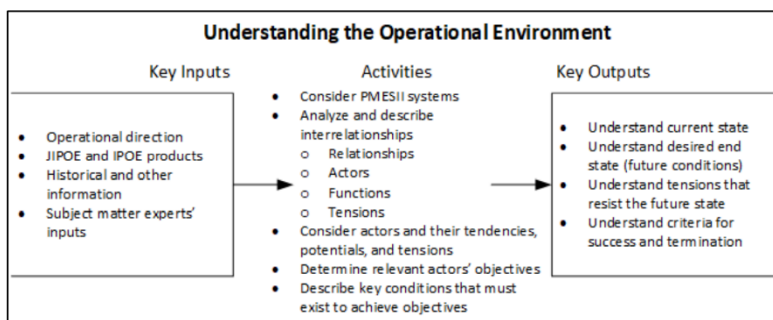
(Risk) What is the likely chance of failure or unacceptable results in performing that sequence of actions? How will I identify if one or more of them occur? What is an acceptable level of “failure”?

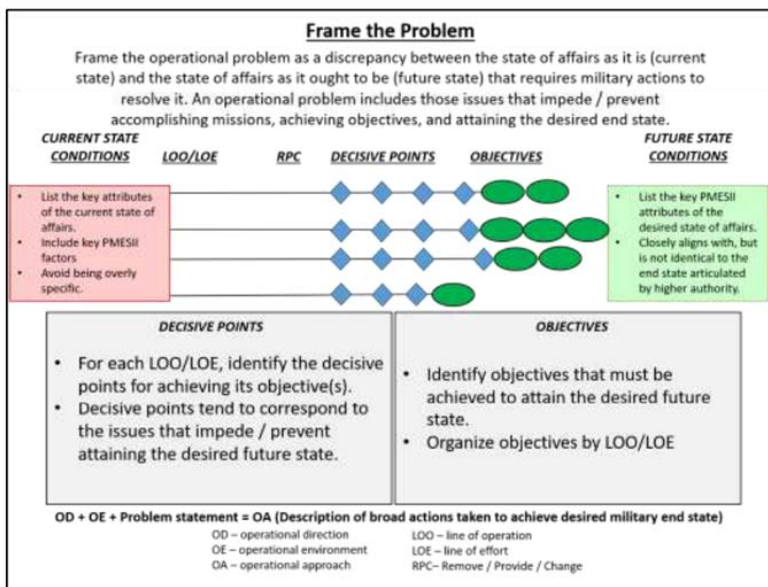
OPERATIONAL DESIGN

The conception and construction of the framework that underpins a campaign or operation plan or order.

- **Regressive Planning:** Determine the desired end state and work backward.
- Navy Design Methodology Steps (NWP 5-01)
 - Understand the Operational Direction
 - Understand the Operational Environment
 - Define the Problem
 - Develop the Operational Approach







- **Operational Considerations.** NWP 3 lists the following considerations to be used in addition to the Elements of Operational Design (below)
 - **Enemy Capability and Enemy Will**
 - War is a clash of wills exercised through a contest of military capability.
 - Fleet strategy requires multiple efforts against the enemy's capability to wage war.
 - Fleet warfare contributes to the fight against the enemy's will.
 - **Annihilation and Erosion Strategies**
 - Strategies against enemy capability are strategies of annihilation.
 - Strategies against enemy will are strategies of erosion.
 - **Sequential and Cumulative Campaigns**
 - Sequential campaigns require a sequence of events in time, space, or purpose to build towards a desired strategic effect.
 - Cumulative campaigns require an accumulation of discrete events, which cumulatively create a desired strategic effect.
 - These forms are not mutually exclusive. They can be used concurrently to great effect.
 - **Direct and Indirect Approaches**
 - Direct approach "attacks the enemy's COG or principal strength by applying combat power directly against it."
 - 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 strength."

- **Elements of Operational Design:** JP5-0 lists four broad categories of Elements of Operational Design: overarching, space (OE), time, and forces.
- 1. **Overarching**
 - **Objective**
 - A clearly defined, decisive, and attainable goal toward which every operation is directed.
 - Must link to a higher-level objective.
 - Must be as unambiguous as possible.
 - Should not specify ways/means.
 - There are four primary considerations for an objective:
 - An objective establishes a single result.
 - An objective (and its associated conditions/effects) should link directly or indirectly to higher-level objectives (and their associated conditions/effects) or to the end state.
 - An objective is specific and unambiguous.
 - An objective does not imply ways and/or means—it is not written as a task.
 - **Military End State**
 - Set of required conditions that defines achievement of all military objectives.
 - Point in time and/or circumstances beyond which the President does not require the military instrument of national power as the primary means to achieve remaining national objectives.
 - **Center of Gravity/Enemy Center of Gravity (COG/ECOG)**
 - Source of power or strength that enables a military force to achieve its objective and is what an opposing force can orient its actions against that will lead to enemy failure.
 - At the operational level, a COG is often associated with the threat's military capabilities such as a powerful element of the armed forces but could include other capabilities in the OE.
 - COGs may change in time as the environment changes.
 - Military objectives should always be linked to a COG.
 - JIPOE/IPB identifies ECOGs; OPT determines friendly COGs.
 - **Effects**
 - Physical and/or behavioral state of a system that results from an action, a set of actions, or another effect.
 - Objectives→ Effects→ Tasks
 - Each desired effect should link directly to one or more objectives.
 - The effect should be measurable. However, cognitive effects are not easily measured, and planners must identify indicators to enable assessment of these effects.
 - The statement should not specify ways and means for accomplishment.
 - The effect should be distinguishable from the objective it supports as a condition for success, not as another objective or a task.
 - **Culmination**
 - That point in time and/or space when the operation can no longer maintain momentum.

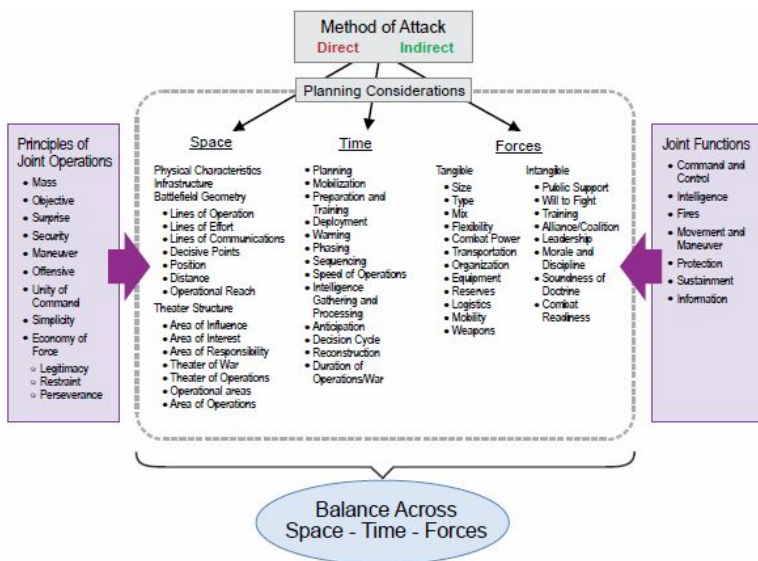
2. Space (Operational Environment)

- **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).
- **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.
- **Decisive Point (DP)**
 - 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.
- **Direct vs. Indirect**
 - The approach in which a Commander contends with a COG.
 - A direct approach attacks the enemy's COG or principal strength by applying combat power directly against it.
 - An indirect approach attacks the enemy's COG by applying combat power against a series of decisive points that lead to the defeat of the COG while avoiding enemy strengths.
 - If strength is insufficient or risk to force too high, direct attack may be inadvisable.
- **Operational Reach**
 - The distance and duration across which a force can successfully employ military capabilities.
 - Basing is foundational to maintaining/extending reach.

3. Time

- **Arranging Operations**
 - Combination of Simultaneous and Sequential operations.
 - Simultaneity:
 - Simultaneous application of integrated military and nonmilitary power against an enemy or adversary's key capabilities and sources of strength.
 - Refers to the concurrent conduct of operations at the tactical, operational, and strategic levels.
- **Phases**
 - A way to organize and conduct a complex joint operation in manageable parts.
 - Phases are distinct in time, terrain, or purpose but must be planned in mutual support and should represent a natural progression and subdivision of the campaign or operation.
 - Each phase should have starting conditions and ending conditions. The ending conditions of one phase are the starting conditions for the next phase.
 - Conditions-driven, not time-driven

- **Branches and Sequels**
 - Branches are planned contingencies that provide a range of alternatives often built into the basic plan. Branches add flexibility to plans by anticipating situations that could alter the basic plan.
 - Sequels anticipate and plan for subsequent operations based on the possible outcomes of the current operation—victory, defeat, or stalemate.
 - **Operational Pause**
 - Operational pauses are useful tools for obtaining the proper synchronization of sustainment and operations.
 - Primary drawback to operational pauses is the risk of forfeiting strategic or operational initiative.
 - **Anticipation**
 - Consider what might happen and look for indicators of forecasted events.
4. **Forces and Functions**
- **Forces**
 - Plan campaigns and operations that focus on defeating either enemy or adversary forces, functions, or a combination of both.
 - **Force Employment Mechanisms**
 - **Defeat Mechanisms:** methods used by friendly forces in combat operations against an enemy force. The three basic defeat mechanisms are: destruction, attrition, and exhaustion.
 - **Stabilization Mechanisms:** DOD plans and conducts. stabilization in support of mission partners to counter subversion, prevent and mitigate conflict, and consolidate military gains in support of strategic objectives.
5. **Balancing**
- **Balance and Tradeoff**
 - Balance different factors to maximize the likelihood of success in the most efficient manner.
 - Commander must decide which tradeoffs will produce the best balance.
 - **Risk.** During planning commanders must assess risk as an element of operational design to ensure the plan has an acceptable level of risk across all elements of design regarding risk-to-mission and risk-to-force.
 - Commander's risk tolerance must be built into the plan.
 - Risk and risk mitigation must be evaluated and re-evaluated throughout planning and execution.



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. Based on this understanding, the Commander must make hard 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.

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

- More than military—includes diplomatic, information, and economic
- 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:** Concentrate the effects of combat power at the most advantageous place and time to produce decisive results.
- **Objective:** Direct military operations toward a clearly defined, decisive, and achievable goal.
- **Offensive:** Seize, retain, and exploit the initiative.
- **Security:** Prevent the enemy from acquiring an unexpected advantage.
- **Economy of Force:** Expend minimum essential combat power to secondary efforts to allocate the maximum possible combat power on primary efforts.
- **Maneuver:** Place the enemy in a position of disadvantage through the flexible application of combat power.
- **Unity of Command:** Ensure unity of effort under one responsible commander for every objective.
- **Surprise:** Strike at a time/place or in a manner for which the enemy is unprepared.
- **Simplicity:** Increase the probability that plans and operations will be executed as intended by preparing clear, uncomplicated plans and concise orders.
- **Restraint:** Prevent unnecessary use of force.
- **Perseverance:** Ensure the commitment necessary to attain the national objectives.
- **Legitimacy:** Maintain legal and moral authority in the conduct of operations.

Operational / Joint Functions

Operational Functions are interrelated capabilities/activities that allow the Commander to synchronize, plan, prepare, conduct, and sustain military actions across the full range of operations. The functions include: C2, Intelligence, Movement and Maneuver, Fires, Sustainment, and Protection. (Note: joint doctrine includes Information as an independent function)

OPERATIONAL C2

Command is the exercise of authority and direction by a properly designated Commander over assigned and attached forces. **Control** is the authority that may be less than full command exercised by a Commander over part of the activities of subordinate or other organizations. C2 ties together all the operational functions and tasks and applies to all levels of war and echelons of command, enabling the Commander to synchronize activities in time, space, and purpose to achieve unity of effort.

- **Command and Control Tenets**
 - Clearly defined authorities, roles, and relationships
 - Mission command
 - Information management and knowledge sharing
 - Communications
 - Commander's intent
 - Mission type orders
 - Timely decision making
 - Coordination mechanisms
 - Battle rhythm discipline
 - Responsiveness
 - Situational awareness
 - Mutual trust
- **Principles of Command and Control**
 - Simplicity
 - Span of Control
 - Unit Integrity
 - Interoperability
- **Organizing for Command and Control**
 - Mission
 - Course of Action developed determines the C2 structure
 - Available forces and capabilities
 - May be organized:
 - Geographically
 - By platform
 - Functionally
 - Hybrid
- **Command Relationships:** The specific command relationship will define the authority a Commander has over assigned or attached forces
 - COCOM – Unique to Combatant Commanders; non-transferable
 - OPCON – Organize commands and forces
 - TACON – Local direction and control of movement/maneuver
 - Supported/supporting (General, mutual, direct, close) - A support relationship established by a common superior commander between subordinate commanders when one organization should aid, protect, complement, or sustain another force. The supported commander should ensure that the supporting commanders understand the assistance required. The supporting commanders will then provide the assistance needed, subject to a supporting commander's existing capabilities and other assigned tasks.

Command Relationships Synopsis

Combatant Command (Command Authority)

(Unique to Combatant Commander)

- Planning, programming, budgeting, and execution process input
- Assignment of subordinate commanders
- Relationships with Department of Defense agencies
- Directive authority for logistics

Operational control when delegated

- Authoritative direction for all military operations and joint training
- Organize and employ commands and forces
- Assign command functions to subordinates
- Establish plans and requirements for intelligence, surveillance, and reconnaissance activities
- Suspend subordinate commanders from duty

Tactical control when delegated

Local direction and control of movements or maneuvers to accomplish mission

Support relationship when assigned

Aid, assist, protect, or sustain another organization

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.

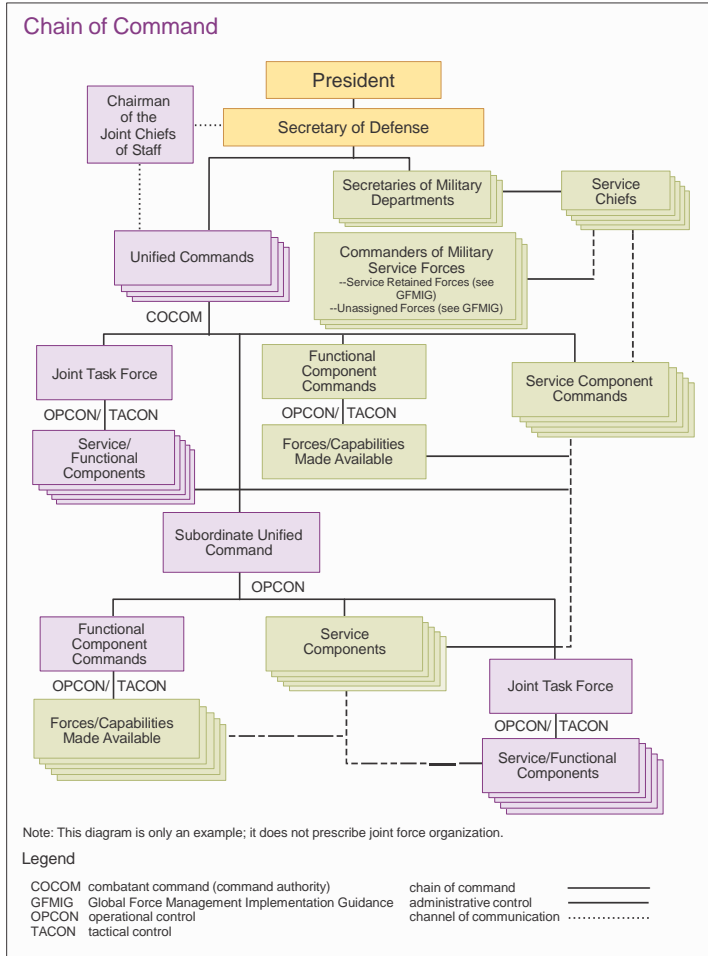
Close Support: The action of the supporting force against targets or objectives that are sufficiently near the supported force as to require detailed integration or coordination of the supporting action.

- **Other Authorities**

- Administrative Control (ADCON) – Direction or exercise of authority over subordinate or other organizations in respect to administration and support.
- 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.

- **Transfer of Forces and Command Relationships**

- When forces are transferred, the command relationship the gaining Commander will exercise (and the losing Commander will relinquish) over those forces must be specified.
- When transfer of forces to a joint force will be permanent (or for an unknown but long period of time) the forces should be reassigned; Combatant Commanders will exercise COCOM authority, and subordinate Joint Force Commanders (JFCs), will exercise OPCON over reassigned forces
- When transfer of forces to a joint force will be temporary, the forces should be attached to the gaining command, and JFCs will exercise OPCON over the attached forces, normally through the Service Component Commander



OPERATIONAL INTELLIGENCE

- Designed to meet the Commander's operational and strategic objectives.
- Multiple sources (e.g., HUMINT, SIGINT, OSINT, IMINT, 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
 - Leveraging 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
 - Identification 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

- 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
- When employed outside of an area of operations they:
 - 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

- Movement is deployment or motion by a force of any size, in any direction, for any purpose.
- Maneuver is employment of forces in the operational area through movement in combination with fires and information to achieve a position of advantage in respect to the enemy.
- 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

- Preservation of 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.
- 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

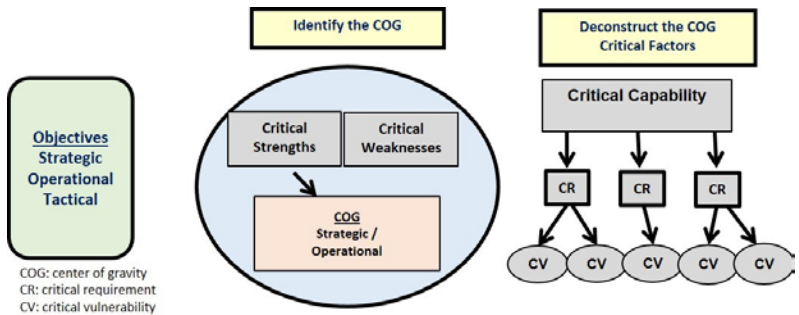
- Protection should be:
 - Comprehensive
 - Integrated
 - Layered
 - Redundant
 - Enduring
- The concept of protection describes how the commander envisions protection supporting the concept of operations. It includes the priorities of protection by mission area (e.g., air and missile defense, surface 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, including critical infrastructure protection (CIP); AT/FP; mine warfare (MIW); antisubmarine warfare; surface warfare; integrated air and missile defense; and chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE). 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 Analysis



Identify the Objective: An objective is clearly defined (i.e., specific, measurable, achievable, relevant, and time-bound), decisive, and attainable goal toward which an operation is directed. Objectives and their supporting effects provide the basis for identifying tasks to be accomplished. Military objectives specify what must be accomplished and provide the basis for describing desired effects. Objectives describe what must be achieved to reach or attain the end state. Achieving operational objectives ties execution of tactical tasks to reaching the military end state.

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 the Critical Factors:** Critical factors analysis is a framework to assist in analyzing and identifying a COG and to aid operational planning against threat networks within the OE. During critical factor analysis, planners evaluate the operational design elements and identify those considered crucial for mission accomplishment. This analysis identifies those characteristics of a threat that present challenges to friendly forces and provide capabilities to that threat. Critical factors are those attributes considered crucial for the accomplishment of the objective; they describe the environment (in relationship to the objective) and should be classified as either sufficient (critical strength) or insufficient (critical weakness).
 - **Critical Strength:** The military or nonmilitary capabilities considered essential to the accomplishment of the military objective(s); **the critical strength determined the most necessary to accomplish the objective is the center of gravity**
 - **Critical Weakness:** The military or nonmilitary capabilities considered essential to the accomplishment of the military objective(s) that, in terms of quantity or quality, are insufficient or inadequate to perform their intended functions
- **Identify the Center of Gravity (COG):** The COG is the source of power that provides moral or physical strength, freedom of action or will to act; determined relative a military objective or end state. It is the source of massed strength, physical or moral, or source of leverage—whose serious degradation, dislocation, neutralization, or destruction would have a decisive impact of the enemy's or one's own ability to accomplish a given objective.
 - COGs exist at all levels of war, and since objectives vary between levels of war, so can COGs
 - At the strategic level, a COG could be a military force, an alliance, political or military leaders, a set of critical capabilities or functions, or national will
 - At the operational level, a COG often is associated with the adversary's military capabilities—such as a powerful element of the armed forces—but could include other capabilities in the OE
- **Deconstructing the COG:** 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; essential to the accomplishment of the specified or assumed objective; the primary abilities essential to the accomplishment of the objective; what the COG must accomplish to achieve the stated objective
 - **Critical requirements:** Essential conditions, resources, and means the COG requires to perform the critical capability
 - **Critical vulnerabilities:** Those aspects or components of critical requirements that are deficient or vulnerable to direct or indirect attack in a manner achieving decisive or significant results
- **Identify Decisive Points (DPs):** DPs are key terrain, specific key event, critical factors (Time, Space, Force), or function that, when acted upon, allows

Commanders to gain a marked advantage over an adversary or contribute 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
- A DP is neutral in nature; that is, by definition they are as important to the adversary as they are to friendly forces
- **Tasks to Tactical Organizations:** Vulnerabilities identified in the previous step will often translate into tasks for tactical-level commanders.
 - Critical vulnerabilities are related to a desired effect, such as the exposure of the operational COG
 - Critical capabilities may identify tasks to subordinates when the capability is not inherent in the COG

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
- Risk is comprised of risk to mission and risk to force. Operational level of war Commanders and planners focus principally on risk to mission.
- 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

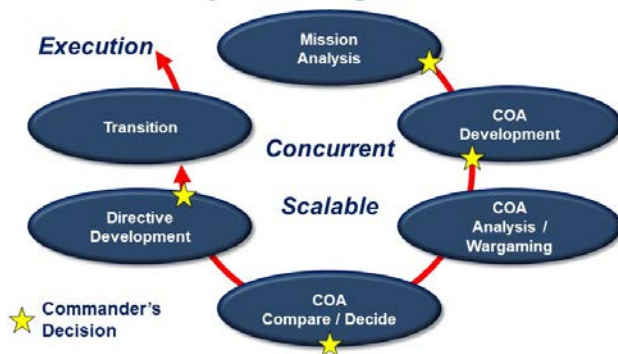
- Joint doctrine identifies two basic types of plans, campaign plans and contingency plans
- The Combatant Command Campaign Plan consists of all plans contained within the established theater or functional responsibilities, to include contingency plans, subordinate and supporting plans, posture plans, 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 SecDef 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
- In a crisis or time-sensitive situation, the CDR reviews previously prepared plans for suitability. The CDR 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.

Contingency and Crisis 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.)
APEX operational activities	Situational awareness Planning Assessment	Situational awareness Planning Execution Assessment
APEX functions	Strategic guidance Concept development Plan development Plan assessment	Strategic guidance Concept development Plan development Plan assessment
Document assigning planning task	CJCS issues: 1. JSCP 2. Planning directive 3. WARNORD (for short suspense planning)	CJCS issues: 1. WARNORD 2. PLANORD 3. SecDef-approved ALERTORD
Forces for planning	Apportioned in JSCP	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.
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	Execution

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”:** 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!

- **Be decisive:** Control the tempo of mission analysis
- **Rehearsal:** Build time for at least one briefing rehearsal
- **Synchronization matrix:** Assign someone as the POC for the synch matrix; this should begin during Mission Analysis
- **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
 - Facts/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.

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.)	

Synchronization and Decision Tools

The OPT will produce three key synchronization and decision tools during the planning process: the **synchronization matrix**, the **decision support matrix** and the **decision support template**. OPTs should begin developing these synchronization and decision tools during the mission analysis step and continue to develop and refine them throughout the planning process.

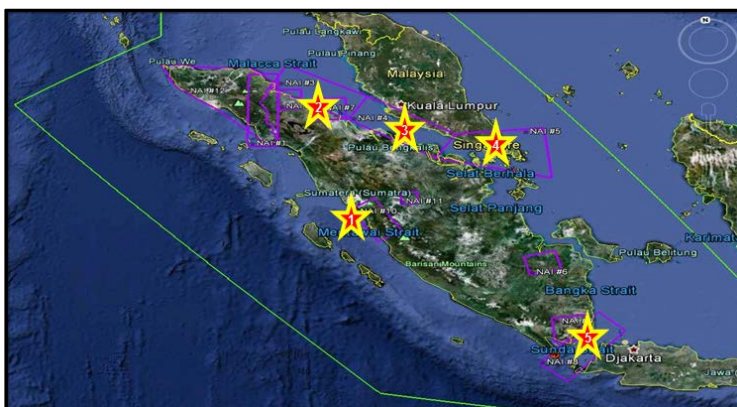
- The **synchronization matrix** is a staff decision and planning aid that graphically reflects the execution of an operation throughout its phases and, when used properly, ensures a COA is synchronized across time, space, and purpose in relation to the operation's objectives. The most important function 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
 - Capture movement/maneuver tasks
 - C2 changes must be captured as tasks to the relinquishing and gaining Commanders
 - 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.
- **Decision support templates (DSTs) and decision support matrices (DSMs)** provide a connection between planning and execution. DST/DSMs capture the linkages between decision points, CCIRs, and planner-identified decision options when CCIR events occur.
 - **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):** Provides a graphic representation of the JOA with geographic areas of identified decision points marked; these may be affiliated with named areas of interest (NAIs)
- DSM/DST construction should begin during Mission Analysis with identification of persons responsible for capturing the information and building the products
- Initial identification of CCIRs and decision points will begin as part of Mission Analysis
- The war gaming process during COA analysis is of particular benefit in determining and validating decision options
- A separate DSM/DST for each phase of the operation may need to be developed depending on the complexity of the operation

DSM example

DP	CFMCC CCIR's	Decision Options	Decision Support Criteria	Location
Decision Point Name (Example Row)	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.E Defend until able to take initiative 1.F Proceed as Planned	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?
1 (Commence Assault)	PIR: Enemy Mines in Approach Channel	OPTION 1A: Delay Assault / Continue to clear OPTION 1B: Withdraw: Use alternate Landing Sites	*1A1: Time available to support JTF CONOP *1B1: Alternate sites support the JTF ConOp / Available	VIC NAI #10
2 (Response to Distributed Denial Services Request)	FFIR: Loss of critical information systems due to DDOS	OPTION 2A: Disconnect Systems OPTION 2B: Reroute OPTION 2C: Defensive Cyber Space Ops	*2A2: Alternate Systems available	No Specific Location

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.

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 (NWP 5-01 Appendix I)

PROCESS

- Identify source(s) of the mission
- Review the commander's initial planning guidance
- Receive IPOE briefing
- Identify command relationships
- Analyze higher command's mission and intent
- Determine specified, implied and essential tasks
 - Specified: come from HHQ orders
 - Implied: Do not include routine tasks or SOP
 - Essential: MUST be executed to achieve mission success; used to develop proposed mission statement
- State the purpose of the operation
- Identify externally imposed limitations
 - Restraints (can't do) and constraints (must do)
- Identify facts and develop planning assumptions
 - Assumptions given by HHQ are treated as facts by subordinate Commanders for planning purposes
 - Own assumptions may be necessary to continue planning
 - Assumptions must be validated or disproved, or they contribute to risk
- Analyze available forces and assets
 - Review forces available/necessary for tasks; compare the two; prepare RFFs/RFCs as required
- Determine friendly COG, and decisive points

- Conduct initial risk assessment
- Develop proposed mission statement
 - Derived from essential tasks

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
- 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
 - Purpose and Agenda
 - Area of Operations (AO)
 - Situation update
 - N2 initial intelligence update (METOC analysis, enemy COG, COAs)
 - Higher mission/intent/CONOPS (if appropriate)
 - Maritime Component Commander's initial planning guidance (if received)
 - Sources of mission
 - Command/force relationships
 - Facts/assumptions
 - Limitations
 - Tasks – specified, implied, essential
 - Forces assigned/apportioned/allocated/shortfalls
 - Friendly centers of gravity and DPs
 - Initial force structure analysis
 - Initial risk assessment and vulnerability assessment
 - Other (Fires, Protection, Intel, IO, Log, C2, Assessment)
 - Proposed mission statement
 - Proposed initial CCIRs
 - Proposed Commander's planning guidance/intent
 - Decision/Guidance requested.
- Develop warning order(s)
 - Approved mission statement

- Approved commander's intent
 - Changes to task organization
 - Commander's planning guidance
 - CCIRs
 - Risk guidance
 - Priorities by operational functions
- Develop Commander's planning guidance
 - Should include mission success criteria
 - Becomes basis for assessment.

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

Note: The OPT leader may consider breakout groups to work on the following areas of Mission Analysis:

- Task Analysis
- Limitations
- Forces Available
- Friendly COG
- Assumptions
- Risk Assessment
- Commander's Intent
- Initial CCIRs
- Governing Factors
- Assessment

NPP Step Two: Course of Action Development

Planners develop solutions (COAs) that accomplish the mission statement and satisfy the commander's intent and planning guidance. Planners then examine each prospective COA for validity by ensuring suitability, feasibility, acceptability, distinguishability, and completeness with respect to the current and anticipated situation, the mission, and the commander's guidance and intent.

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

- Review IPOE, updated intelligence products, and Mission Analysis
- Discern the Common Framework: The framework focuses the planners on the most important aspects of the operation by identifying the operational objective and a list of prioritized tasks. (If the operation is phased, objectives and prioritized tasks by phase are identified). This allows planners to view the operational environment as an indivisible whole by translating the commander's vision of decisive, supporting, shaping, and sustaining actions into a framework within which to develop initial COA(s).
 - Use essential and key tasks aligned to decisive, shaping, and sustaining actions
 - **Decisive Action:** Any action the Commander deems fundamental to achieving mission success
 - **Supporting Action(s):** Activities that directly support the decisive action, i.e., set conditions that enable accomplishing the objective now.
 - **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 (NWP 5-01 Appendix D)
- Generate COA options: Review Commander's planning guidance for insight/direction. OPTs may have to generate multiple COAs to provide the Commander with options for accomplishing the mission. The OPT leader can either create COA breakout groups where each group develops a COA simultaneously or work as a single group developing one COA at a time. Focus on established decisive points and adversary critical vulnerabilities (CVs) to develop tasks and apply combat power. Consider how to protect friendly CVs identified in Mission Analysis. Ensure that COAs address and assign tasks for movements and C2 changes. The OPT may develop different COA options based on:
 - Main effort/geographic focus
 - Force organization/designation and employment of reserve force(s)
 - Application of Principles of Joint Operations
 - Application of Operational Functions
 - Avenue of approach
 - Sequencing and/or timing of operations
 - DRAW-D (defend, reinforce, attack, withdraw, delay)
 - Others
- Developing the COA:
 - Establish the COA's framework
 - Use the common framework and identified tasks from mission analysis as the starting point
 - Clearly define the commander's objective and prioritize the associated tasks as decisive, supporting, shaping, or sustaining actions.
 - The task identified as the essential task in the common framework becomes the basis of the decisive action. Annotate the decisive action on the planning map and clearly state the task and purpose for the decisive action.
 - For the remaining tasks, prioritize them as supporting, shaping, or sustaining actions, annotate them on the planning map and clearly state their priority, task and purpose. (New tasks will likely emerge as the COA framework becomes more detailed. These tasks are also prioritized and annotated on the planning map.
 - Planners should also record timing considerations such as the conditions for beginning or ending the operation or phase, current assumptions and limitations, and other pertinent information that was initially developed during mission analysis.
 - Array operational framework actions geographically
 - Array generic units/forces to operational framework actions
 - Apply insight where certain capabilities/forces must operate due to OE
 - Assign tactical level (UNTL language) tasks and purposes geographically (based on framework and generic units/forces)
 - Convert generic units/forces to specific units/forces

- Task organize and recommend C2 relationships
- 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
- Recommend command and control relationships and structure
- Synchronize
- Commander's input and refinement

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.

- Prepare COA sketches and statements
 - **Sketch:** Map of the JOA that identifies friendly and enemy positions by phase
 - Maritime domain control measures (e.g., CVOA, AOA)
 - Identify main/supporting/sustaining/shaping efforts by phase
 - Develop C2 structure that shows changes by phase
 - **Statement:** Overall description of the COA
 - Main/supporting/sustaining/shaping efforts listed by phase
 - Estimated phase duration
 - Use UJTL/UNTL terms for task and purpose
 - Force employment by phase
 - Identify location, sequencing of major units by phase
 - Identify phase end state criteria in maritime domain
- Review ROE
- Refine initial risk assessment for each COA (NWP 5-01 Appendix E)
- Test for validity (Suitable, Feasible, Acceptable, Distinguishable and Complete)

- **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?
- **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
- Prepare COA briefing
 - Updated IPOE if applicable
 - Enemy most likely and most dangerous COAs
 - Higher Commander's mission and intent
 - CFMCC mission
 - Commander's intent
 - Commander's planning guidance
 - Relative Combat Power Assessment (RCPA)

- Updated facts and assumptions
- Presentation of complete COA by phase with rationale
 - Each COA should include task organization; sketch and statements by phase; identification of main, supporting, shaping and sustaining efforts by phase; illustration of force laydown complete with control measures; highlight risk and mitigation measures; include reference to essential, specified, and implied tasks as well as decisive points and COG; recommended ROE revisions; recommended RFCs or RFFs
 - Brief each supporting function as required/directed (e.g., fires, sustainment, deploying concept, IO themes)
- Repeat for each COA presented

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 standing ROE and supplemental ROE changes or additions
- Initial, refined decision tools: synchronization matrix, DST/DSM, risk assessment matrix, and CCIRs

TERMS FOR COA STATEMENTS AND TASKS/PURPOSES:

<i>Actions by Friendly Forces</i>					
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					

Effects on the Threat

Block	Contain	Deceive
Defeat	Degrade	Deny
Destroy	Disrupt	Exploit
Interdict	Isolate	Limit
Neutralize	Suppress	Turn

Common Purpose Statements

Allow	Cause	Create	Deny
Divert	Enable	Facilitate	Identify
Protect	Influence	Observe	Open
Preserve	Prevent	Support	Surprise

Planning Days and Hours Definitions

C-Day: Deployment operation commences.

L-Hour: Hour on C-day a deployment operation commences.

D-Day: Operation commences.

H-Hour: Hour on D-day an operation commences.

E-Day: Landing force begins to embark.

M-Day: Mobilization commences.

F-Hour: SecDef announces decision to mobilize Reserves.

N-Day: Active-duty unit is notified for deployment or redeployment.

O-Day: Off-load day

R-Day: Redeployment day.

S-Day: POTUS authorizes selective reserve call-up.

T-Day: POTUS declares a national emergency; partial mobilization.

W-Day: POTUS declares. Associated w/ adversary decision to prepare for war.

NPP Step Three: Course of Action Analysis (War Gaming)

Course of action analysis closely examines potential COAs to confirm their validity and refine them to account for enemy reactions. 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.

INPUTS

- Approved mission statement and Commander's intent are brought forward.
- Commander's war gaming guidance; may include all or a portion of the following:
 - Which friendly COAs to war game against which enemy COAs (mostly likely, most dangerous, or both)
 - Critical events (essential tasks) and/or decision points to be considered
 - Evaluation criteria that the Commander deems critical to mission accomplishment
- Governing factors: Factors that the Commander deems critical to mission success and drove, in part, COA development.
- Current enemy COAs: Ongoing intelligence efforts may result in refinements to enemy COAs.
- Current IPOE: Ongoing intelligence efforts may yield updates to the IPOE.
- Staff estimates: Throughout the planning process, the staff develops estimates of supportability of the COAs based on their particular operational function or activity, the environment, the mission, and intent.
- Risk assessment and mitigation: Planning team efforts continue to assess risk within the framework of approved COAs.
- Other products and information: Several other developing products can include updated facts and planning assumptions, a synchronization matrix, decision support products (template and matrix), requests for capability/forces and potential authorities requests.

PROCESS

- Organize for war gaming
 - Designate a facilitator and an individual to monitor and track RFFs and RFIs.
 - A display of critical mission analysis information
 - Higher and own mission, Commander's intent, CCIRs
 - Event template
 - Recording method (war game worksheet)
 - Completed COAs, to include control measures and ISR collection plan
 - Means to post adversary and friendly unit symbols

- Chart or map of JOA/OA (either paper or digital)
- Updated estimates and common operating picture
- List all friendly forces
- List known critical events: Essential tasks, or a series of critical tasks, conducted over a period of time that require detailed analysis
- Red Cell
 - Should consist of individuals of varied operational backgrounds and specialties
 - The primary purpose is to provide additional operational analysis of the adversary; they employ probable adversary COAs against the friendly COAs
 - The objective is not to defeat friendly COAs during the war game but to assist in the improvement and validation of friendly COAs; Red Cell participation in the war game makes friendly COAs stronger and more viable for execution in battle
- Select war gaming method
 - Essential Task / Critical Event
 - Phase
 - Avenue in Depth
 - Belt
 - Box
- Select method to record and display results
 - War Game Worksheet: Allows the staff to synchronize the COA across time and space in relation to the adversary COA
- Conduct the war game and display and assess results
 - Begins with an event designated by the facilitator
 - The facilitator must ensure that all members of the war game know what critical events will be war gamed and what techniques will be used
 - The war game follows an action-reaction-counteraction cycle
 - **Actions:** Those events initiated by either the side with the initiative or as the facilitator designates
 - **Reactions:** The opposing side's actions in response
 - **Counteractions:** The first side's responses to reactions
 - This sequence of action-reaction-counteraction continues until the critical event is completed or until the Commander decides to use another COA to accomplish the mission
- Example War Game Sequence (not all inclusive)
 - Conduct roll call. Ensure that subordinate task forces, adjacent components, staff directorates, and special staff are represented.
 - Explain the purpose, the overall process, and expected war game results
 - Review war game rules
 - Review products to date: Mission Analysis products, risk assessment, Commander's intent and war gaming guidance, Commander's evaluation criteria/governing factors, updated facts and assumptions, the proposed COAs, etc.

- Review the method of war gaming, critical events or phases to consider (with start and end state desired conditions), identified decisive points
- Explain current friendly and adversary disposition
- Explain current ISR effort
- Conduct action-reaction-counteraction cycle using subordinate maneuver forces (normally friendly side initiates action first).
- Use the war game worksheet as an agenda for sequence
- Assess and record strengths and weaknesses, how the COA addresses Commander's evaluation criteria, and any resulting RFFs for additional capability
- Record adjusted tasks and purpose and any additional tasks and purpose
- Address operational functions and their effect during the critical event or phase
- Make modifications as necessary
 - Command and control: Task organization adjustments (support and command relationship adjustments), ROE modifications, IO requirements (if not separately addressed), initiate decision tools (DST/DSM) as decision points are addressed and decision criteria, associated CCIRs and options are developed and associated with intelligence templates
 - Intelligence: PIRs, collection plan inputs, other ISR requirements
 - Movement and Maneuver: Updated maneuver tasks
 - Fires: HPT, non-lethal and lethal, synchronization requirements
 - Sustainment: Address logistics requirements, required support outside the force
 - Protection: Air and missile defense requirements, CBRNE, joint search and rescue requirements
- Risk assessment and mitigation
- Branches and Sequels
- Refine staff estimates
- Conduct war game briefing (NWP 5-01 Chapter 4)

OUTPUTS

- Refined COAs with graphics, statement, task organization
- Refined synch matrix
- Refined DST/DSM as well as refined NALs
- Refined resource shortfalls
- List of requested authorities
- 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:
 - IO objectives and tasks
 - Recording the advantages and disadvantages of each COA as they become evident
 - Intelligence collection plan and resulting ISR plan
 - Risk to force and mission assessment, risk mitigation and determined residual risk
 - Targeting process integration to include identification and refinement of high payoff target(s)
 - Proposed ROE refinement

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 the war game)
- Approved evaluation criteria and governing factors
- Refined staff estimates
- Proposed risk controls

PROCESS

- Present staff estimates.
 - Review staff estimates from each staff section/operational function representative to ensure that each COA is supportable
 - Staff sections should identify the strengths and weaknesses of each COA from their functional area perspective and then present staff estimates that indicate which COAs can be best supported
- Discuss capability to assess COAs.
 - Determine the effort required to assess each COA
 - Ease of assessment, however, should not drive COA selection
- Apply risk mitigation.
- Perform COA comparison.
 - Determine advantages, disadvantages, and modifications for each COA based on commander's evaluation criteria / governing factors
 - Compare the COAs against each other based on the identified advantages and disadvantages
- Review COAs.
- Make final test for validity.
- Present COA decision brief.
 - HHQ Intent
 - Approved mission statement
 - Status of friendly forces
 - Updated IPOE
 - Enemy COAs used in wargaming
 - Friendly COAs
 - Recommend COA

- 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 or modified COA (time permitting)
- Finalize synchronization matrix.
- Develop the CONOPS.
 - Written summary of the approved COA based on the synchronization matrix, the COA sketch and statement, and any other current planning products
 - Clearly and concisely express what the commander intends to accomplish and how it will be done using available resources
 - The CONOPS includes:
 - Narrative 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
- Prepare Decision Support Tools.
- Refine IPOE.

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.

1. A plan is prepared in a deliberate manner in anticipation of operations and normally serves as the basis for an order.

2. An order is a written or oral communication that directs actions and focuses a subordinate's tasks and activities toward accomplishing the mission.

DIRECTIVES FORMAT (SMEAC)

- Situation
 - General
 - Enemy forces: Enemy center of gravity, enemy critical factors, probable enemy courses of action, terrorist threats
 - Friendly forces: Friendly center of gravity, friendly critical factors, HHQ mission and intent, missions of adjacent units
 - IGOs/NGOs
 - Civil considerations
 - Attachments and detachments
- Mission
- Execution
 - Commander's intent
 - Concept of operations by phase and/or by function as required
 - Tasks to subordinate and supporting units; include purposes for each task; specify "on order" (O/O) or "be prepared to" (BPT) when appropriate
 - O/O missions are to be executed at an unspecified time in the future
 - BPT missions assigned to units might be executed; they are planned after any "on-order" missions
 - Coordinating instructions
 - Rules of Engagement
- Admin and Log
 - Concept of Support
 - Material and services
 - Medical services
 - Personnel
 - Civil affairs
 - Public affairs
- Command and Control
 - Command relationships
 - Location of Commander

- Succession of command
- Liaison requirements
- Command, control, and communications
- Reports

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.

INPUTS

- From the Commander
 - Mission statement
 - Commander's intent
- From the staff
 - 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

PROCESS

- Develop base paragraphs (SMEAC)
 - 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
 - Writing tips
 - Be CLEAR and DIRECT
 - Use third person, active voice (except Commander's intent), present tense
 - Be directive
 - Proper grammar, spelling, etc.
 - 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

- Develop appropriate annexes, appendices, and tabs
- Internal reconciliation of the directive.
- Cross-walk directive to synchronize with other commands' directives
- 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

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

- From the Commander
 - Approved base directive
- From the staff
 - Supporting annexes, appendices and tabs (as applicable)
 - Synch matrix
 - Updated decision support tools (DST, DSM, etc.)
 - CONOPS
 - Operational Assessment plan
 - Risk assessment matrix
 - Refined IPOE
 - Outline FRAGORDs for branch plans
 - Information for future missions/sequels
 - Staff estimates
 - OPGENs, OPTASKs, and supplements (if available)

PROCESS

- Prepare for transition
- Conduct the transition:
 - Transition Brief: Internal for staff and/or external to subordinates and adjacent components
 - Confirmation Brief: delivered by subordinate commander to their higher HQ
 - Rehearsal of Concept, simulation, partial or full force rehearsal (as required)
- Transition 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
- 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

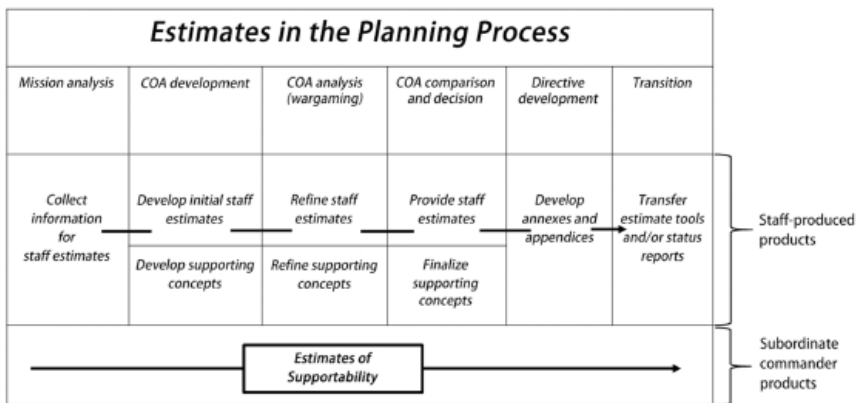
- Develop / write the order throughout the process
- Require early staff and subordinate involvement

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

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
Upon receipt of mission (not an NPP step) 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.

Mission Analysis Initial Staff Estimate Para 1 Mission and Considerations	CDR's initial planning guidance HHQ Directives Existing staff estimates Existing intel or other section estimates OPT direction	Define the problem and mission by developing an understanding of mission, environment, terrain, friendly and enemy forces, neutrals, and time	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.
COA Development Concept of support for each COA. Para 3 COA Dev.	OPT has presented MA brief Approved mission statement Initial CDR's intent and planning guidance OPT has brainstormed possible COAs	Develop COAs that accomplish the mission within the CDR's guidance	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.
COA Analysis Refined Staff Estimates	Approved COAs Refined ECOAs	Evaluate the effectiveness of each friendly COA against	Contribute to developing critical events, decision points, and governing factors.

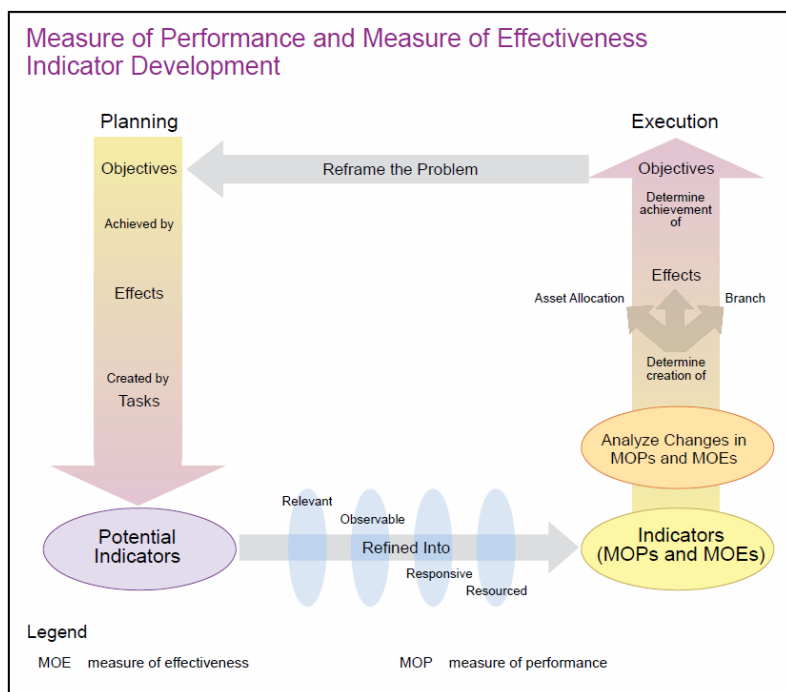
Para 4 COA Analysis, staff area	CDR's war gaming guidance Staff estimates paras 1-3	ECOA's using specified evaluation criteria	Capture key support and execution considerations including risk assessment, casualty projections, ISR requirements and limitations, projected locations, C2 system requirements, 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.
COA Comparison 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.
COA Decision and Approval 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.
Directive Development 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.
Transition 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 intelligence 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?

GLOSSARY

Source of terms and definitions are found in DOD Dictionary of Military and Associated Terms; Navy and Marine Corps' Supplement to the DOD Dictionary of Military and Associated Terms; Joint, Naval Service and Allied doctrinal publications; and CJCS publications.

administrative control (ADCON) – Direction or exercise of authority over subordinate or other organizations in respect to administration and support.

administrative control (ADCON) (NATO) – The direction or exercise of authority over subordinate or other organizations with respect to administrative matters such as personnel management, supply, services and other matters not included in the operational mission of the subordinate or other organizations. (AJP 3)

afloat forward staging base (AFSB) - A modular, cost-effective, and capable commercial conversion solution that meets Marine Corps requirements for aviation, roll-on/roll-off, and dry cargo prepositioning, amphibious operations, command and control, communications system, medical, safety/survivability, and personnel accommodation. (MCRP 1-10.2, Marine Corps Supplement to the DOD Dictionary)

alert order (ALERTORD) – 1. A planning directive normally associated with a crisis, issued by the Chairman of the Joint Chiefs of Staff, on behalf of the President or Secretary of Defense, that provides essential planning guidance and directs the development, adaptation, or refinement of a plan/order after the directing authority approves a military course of action. 2. A planning directive that provides essential planning guidance, directs the initiation of planning after the directing authority approves a military course of action, but does not authorize execution.

allocation – 1. Distribution of limited forces and resources for employment among competing requirements. 2. 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.

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.

anti-access (A2) – Action, activity, or capability, usually long-range, designed to prevent an advancing enemy force from entering an operational area.

apportionment – 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.

area denial (AD) – Action, activity, or capability, usually short-range, designed to limit an enemy force's freedom of action within an operational area.

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.

area of interest (AOI) – That area of concern to the Commander, including the area of influence, areas adjacent thereto, and extending into enemy territory.

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.

area of responsibility (AOR) – The geographical area associated with a Combatant Command within which a Geographic Combatant Commander has authority to plan and conduct operations.

assessment – 1. A continuous process that measures the overall effectiveness of employing capabilities during military operations. 2. Determination of the progress toward accomplishing a task, creating a condition, or achieving an objective. 3. Analysis of the security, effectiveness, and potential of an existing or planned intelligence activity. 4. Judgment of the motives, qualifications, and characteristics of present or prospective employees or "agents."

assign – 1. To place units or personnel in an organization where such placement is relatively permanent, and/or where such organization controls and administers the units or personnel for the primary function, or greater portion of the functions, of the unit or personnel. 2. To detail individuals to specific duties or functions where such duties or functions are primary and/or relatively permanent.

assigned forces - Those forces and resources that have been placed under the combatant command (command authority) of a unified commander in the Forces for Unified Commands Memorandum. Forces and resources so assigned are available for normal peacetime operations of that command.

assumption – A specific supposition of the operational environment that is assumed to be true, in the absence of positive proof, essential for the continuation of planning.

attach(ed) – 1. The placement of units or personnel in an organization where such placement is relatively temporary. 2. The detailing of individuals to specific functions where such functions are secondary or relatively temporary.

authorized departure – A procedure, short of ordered departure, by which mission employees or dependents or both, are permitted to leave post in advance of normal rotation when the national interests or imminent threat to life require it.

Base Plan (BPLAN) – Level 2 Planning Detail. A BPLAN describes the concept of operations (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 flexible deterrent options (FDOs) and flexible response options (FROs), to provide multiple options to address contingencies as they develop or to shape the developing situation. (JP 5-0)

battle rhythm – A deliberate, daily schedule of command, staff, and unit activities intended to maximize use of time and synchronize staff actions.

branch (plan) – The contingency options built into the base plan used for changing the mission, orientation, or direction of movement of a force to aid success of the operation based on anticipated events, opportunities, or disruptions caused by enemy actions and reactions.

campaign – A series of related operations aimed at achieving strategic and operational objectives within a given time and space.

Campaign plan - A joint operation plan for a series of related major operations aimed at achieving strategic or operational objectives within a given time and space.

center of gravity (COG) – The source of power that provides moral or physical strength, freedom of action, or will to act.

choke-point control – The ability to, directly or indirectly, ensure control of a given strait/narrows by one's forces. The converse is choke-point control denial. (NTRP 1-02)

collection plan – A systematic scheme to optimize the employment of all available collection capabilities and associated processing, exploitation, and dissemination resources to satisfy specific information requirements.

combatant command (command authority) (COCOM) – Nontransferable command authority, which cannot be delegated, of a combatant commander to perform those functions of command over assigned forces involving organizing and employing commands and forces; assigning tasks; designating objectives; and giving authoritative direction over all aspects of military operations, joint training, and logistics necessary to accomplish the missions assigned to the command.

combat power – The total means of destructive and/or disruptive force that a military unit/formation can apply against the opponent at a given time.

command and control (C2) – The exercise of authority and direction by a properly designated Commander over assigned and attached forces in the accomplishment of the mission.

command relationships – The interrelated responsibilities between Commanders, as well as the operational authority exercised by Commanders in the chain of command; defined further as combatant command (command authority), operational control, tactical control, or support.

commander's critical information requirement (CCIR) – An information requirement identified by the Commander as being critical to facilitating timely decision making.

Commander's Estimate – Level 1 Planning Detail. This level of planning has the least detail. It produces multiple courses of action (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 (SecDef) with military COAs to meet a potential contingency. The estimate reflects the commander's analysis of the various COAs and recommends a COA. (JP 5-0)

commander's estimate – The Commander's initial assessment in which options are provided in a concise statement that defines who, what, when, where, why, and how the course of action will be implemented.

commander's intent – A clear and concise expression of the purpose of the operation and the desired military end state that supports mission command, provides focus to the staff, and helps subordinate and supporting Commanders act to achieve the Commander's desired results without further orders, even when the operation does not unfold as planned.

commander's planning guidance – The Commander's vision of decisive and shaping actions used to assist the planning team in determining the main effort, phases of the operation, location of critical events, and other aspects of the operation the Commander deems pertinent to course of action development. (NTRP 1-02)

common operational picture (COP) – A single identical display of relevant information shared by more than one command that facilitates collaborative planning and assists all echelons to achieve situational awareness.

concept of operations (CONOPS) – A verbal or graphic statement that clearly and concisely expresses what the commander intends to accomplish and how it will be done using available resources.

Concept Plan (CONPLAN) – Level 3 Planning Detail. A CONPLAN is an operation plan (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 operation order (OPORD). (JP 5-0)

constraint – In the context of planning, a requirement placed on the command by a higher command that dictates an action, thus restricting freedom of action.

control – 1. Authority that may be less than full command exercised by a commander over part of the activities of subordinate or other organizations. (JP 1) 2. Physical or psychological pressures exerted with the intent to assure that an agent or group will respond as directed. (JP 3-0).

course of action (COA) – 1. Any sequence of activities that an individual or unit may follow. 2. A scheme developed to accomplish a mission.

critical capability (CC) – A means that is considered a crucial enabler for a center of gravity to function as such and is essential to the accomplishment of the specified or assumed objective(s).

critical requirement (CR) – An essential condition, resource, and means for a critical capability to be fully operational. (NWP 5-01)

critical strength – A military or nonmilitary capability considered essential to the accomplishment of one's or the adversary's military objective(s); the most important among the critical strengths is the center of gravity. (NTRP 1-02)

critical vulnerability (CV) – An aspect of a critical requirement which is deficient or vulnerable to direct or indirect attack that will create decisive or significant effects.

critical weakness – A military or non-military capability considered essential to the accomplishment of one's or the adversary's military objectives, but in terms of quantity or quality or both, is insufficient or inadequate to perform its intended functions. (NTRP 1-02)

culminating point – The point at which a force no longer has the capability to continue its form of operations, offense or defense.

cyberspace operations (CO) – The employment of cyberspace capabilities where the primary purpose is to achieve objectives in or through cyberspace.

cyberspace security – Actions taken within protected cyberspace to prevent unauthorized access to, exploitation of, or damage to computers, electronic communications systems, and other information technology, including platform information technology, as well as the information contained therein, to ensure its availability, integrity, authentication, confidentiality, and nonrepudiation.

decision point – A point in space and time when the Commander or staff anticipates making a key decision concerning a specific course of action.

decisive point (DP) – Key terrain, key event, critical factor, or function that, when acted upon, enables commanders to gain a marked advantage over an enemy or contribute materially to achieving success.

decisive action – Any action the commander deems fundamental to achieving mission success. (NTRP 1-02)

defense support of civil authorities (DSCA) – Support provided by federal military forces; Department of Defense (DOD) civilians; DOD contract personnel; and DOD component assets, to include National Guard (NG) forces (when the Secretary of Defense, in coordination with the governors of the affected states, elects and requests to use and fund those forces in Title 32, United States Code), in response to a request for assistance from civil authorities for domestic emergencies, cyberspace incident response, law enforcement support, and other domestic activities or from qualifying entities for special events. DSCA includes support to prepare, prevent, protect, respond, and recover from domestic incidents. DSCA is provided in response to requests from civil authorities and upon approval from appropriate authorities. DSCA is conducted only in the US homeland. (JP 3-28)

deployment order (DEPORD) – 1. A directive for the deployments of forces for operations or exercises. 2. A directive from the Secretary of Defense, issued by the Chairman of the Joint Chiefs of Staff, 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.

disaster relief (DR) – Goods and services provided to meet the immediate needs of disaster-affected communities. (NTRP 1-02)

economy of force – The judicious employment and distribution of forces so as to expend the minimum essential combat power on secondary efforts to allocate the maximum possible combat power on primary efforts.

effect – 1. The physical or behavioral state of a system that results from an action, a set of actions, or another effect. 2. The result, outcome, or consequence of an action. 3. A change to a condition, behavior, or degree of freedom.

electromagnetic warfare (EW) – Military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy.

end state – The set of required conditions that defines achievement of the Commander's objectives.

essential task – A specified or implied task an organization must perform to accomplish the mission.

evaluation criteria – Standards used by the staff during course of action analysis and comparison to help identify advantages and disadvantages of the various courses of action with the intent of making a decision recommendation to the Commander. (NTRP 1-02)

execute order (EXORD) – 1. An order issued by the Chairman of the Joint Chiefs of Staff, at the direction of the Secretary of Defense, to implement a decision by the President to initiate military operations. 2. An order to initiate military operations as directed.

expanded maritime interception operations (EMIO) – Broadened maritime interception operations to intercept targeted personnel or material that pose an imminent threat to the United States and may involve multinational forces and implementation without sanctions. (NTRP 1-02)

expeditionary force – An armed force organized to achieve a specific objective in a foreign country.

force protection (FP) – Preventive measures taken to mitigate hostile actions against Department of Defense personnel (to include family members), resources, facilities, and critical information.

foreign disaster relief (FDR) – Assistance that can be used immediately to alleviate the suffering of foreign disaster victims that normally includes services and commodities as well as the rescue and evacuation of victims; the provision and transportation of food, water, clothing, medicines, beds, bedding, and temporary shelter; the furnishing of

medical equipment and medical and technical personnel; and making repairs to essential services.

foreign humanitarian assistance (FHA) – Department of Defense activities, conducted outside the United States and its territories, to directly relieve or reduce human suffering, disease, hunger, or privation.

forward arming and refueling point (FARP) - A temporary facility, organized, equipped, and deployed, to provide fuel and ammunition necessary for the employment of aviation maneuver units in combat.

fragmentary order (FRAGORD) – An abbreviated operation order issued as needed to change or modify an order or to execute a branch or sequel.

freedom of navigation/freedom of the seas - Freedom of navigation is a principle of customary international law that ships flying the flag of any sovereign state shall not suffer interference from other states, apart from the exceptions provided for in international law.

freedom of navigation operations – Operations conducted to protect United States navigation, overflight, and related interests on, under, and over the seas.

Freedom of Navigation Operations Program (FONOPS) - The FONOPS program is a combination of diplomatic protests and operational assertions against coastal nations' excessive maritime claims. The U.S. government implements this program against excessive maritime claims by coastal nations in every region of the world, based upon the U.S.' global interest in mobility and access.

friendly force information requirement (FFIR) – Information the Commander and staff need to understand the status of friendly force and supporting capabilities.

full command (FULLCOM) (NATO) – The military authority and responsibility of a superior officer to issue orders to subordinates. It covers every aspect of military operations and administration and exists only within national Services. The term 'command', as used internationally, implies a lesser degree of authority than when it is used in a purely national sense. No NATO or coalition Commander has full command over the forces assigned to him since, in assigning forces to NATO, nations will delegate only operational command or operational control. (AJP 3)

governing factors – In the context of planning, those aspects of the situation (or externally imposed factors) that the Commander deems critical to the accomplishment of the mission. (NWP 5-01)

high-payoff target (HPT) – A target whose loss to the enemy will significantly contribute to the success of the friendly course of action.

high-value target (HVT) – A target the enemy Commander requires for the successful completion of the mission.

implied task – In the context of planning, a task derived during mission analysis that an organization must perform or prepare to perform to accomplish a specified task or the mission, but which is not stated in the higher headquarters order.

information assurance (IA) – Actions that protect and defend information systems by ensuring availability, integrity, authentication, confidentiality, and nonrepudiation.

information management — The function of managing an organization's information resources for the handling of data and information acquired by one or many different systems, individuals, and organizations in a way that optimizes access by all who have a share in that data or a right to that information.

information operations (IO) – The integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own.

intelligence preparation of the battlespace (IPB) – The analytical methodologies employed by the Services or Joint Force component commands to reduce uncertainties concerning the enemy, environment, time, and terrain.

intelligence preparation of the operational environment (IPOE) – An analytical methodology employed to reduce uncertainties concerning the enemy, environment, and terrain for all types of operations. Intelligence preparation of the operational environment builds an extensive database for each potential area in which a unit may be required to operate. The database is then analyzed in detail to determine the impact of the enemy, environment, and terrain on operations and presents it in graphic form. Intelligence preparation of the operational environment is a continuing process.
(NTRP 1-02)

intelligence, surveillance, and reconnaissance (ISR) – 1. An integrated operations and intelligence activity that synchronizes and integrates the planning and operation of sensors, assets, and processing, exploitation, and dissemination systems in direct support of current and future operations. 2. The organizations or assets conducting such activities.

interdiction – 1. An action to divert, disrupt, delay, or destroy the enemy's military surface capability before it can be used effectively against friendly forces, or to achieve enemy objectives. 2. In support of law enforcement, activities conducted to divert, disrupt, delay, intercept, board, detain, or destroy, under lawful authority, vessels, vehicles, aircraft, people, cargo, and money.

joint doctrine – Fundamental principles that guide the employment of United States military forces in coordinated action toward a common objective and may include terms, tactics, techniques, and procedures.

joint electromagnetic spectrum operations (JEMSO) – Military actions undertaken by a joint force to exploit, attack, protect, and manage the electromagnetic environment.

joint force – A force composed of elements, assigned or attached, of two or more Military Departments operating under a single Joint Force Commander.

joint force air component commander (JFACC) – The Commander within a unified command, subordinate unified command, or Joint Task Force responsible to the establishing Commander for recommending the proper employment of assigned, attached, and/or made available for tasking air forces; planning and coordinating air operations; or accomplishing such operational missions as may be assigned.

joint force commander (JFC) – A general term applied to a Combatant Commander, subunified Commander, or Joint Task Force Commander authorized to exercise combatant command (command authority) or operational control over a joint force.

joint force land component commander (JFLCC) – The Commander within a unified command, subordinate unified command, or Joint Task Force responsible to the establishing Commander for recommending the proper employment of assigned, attached, and/or made available for tasking land forces; planning and coordinating land operations; or accomplishing such operational missions as may be assigned.

joint force maritime component commander (JFMCC) – The Commander within a unified command, subordinate unified command, or Joint Task Force responsible to the establishing Commander for recommending the proper employment of assigned, attached, and/or made available for tasking maritime forces and assets; planning and coordinating maritime operations; or accomplishing such operational missions as may be assigned.

joint force special operations component commander (JFSOCC) – The Commander within a unified command, subordinate unified command, or Joint Task Force responsible to the establishing Commander for recommending the proper employment of assigned, attached, and/or made available for tasking special operations forces and assets; planning and coordinating special operations; or accomplishing such operational missions as may be assigned.

joint functions – Related capabilities and activities placed into seven basic groups of command and control, information, intelligence, fires, movement and maneuver, protection, and sustainment to help Joint Force Commanders synchronize, integrate, and direct joint operations.

joint integrated prioritized target list (JIPTL) – A prioritized list of targets approved by the Joint Force Commander.

joint intelligence preparation of the operational environment (JIPOE) – The analytical process used by joint intelligence organizations to produce intelligence estimates and other intelligence products in support of the Joint Force Commander's decision-making process.

joint operations – Military actions conducted by joint forces and those Service forces employed in specified command relationships with each other, which of themselves, do not establish joint forces.

joint operations area (JOA) – An area of land, sea, and airspace, defined by a geographic Combatant Commander or subordinate unified Commander, in which a Joint Force Commander (normally a joint task force commander) conducts military operations to accomplish a specific mission.

joint planning group (JPG) – A planning organization consisting of designated representatives of the joint force headquarters principal and special staff sections, joint force components (Service and/or functional), and other supporting organizations or agencies as deemed necessary by the Joint Force Commander.

joint targeting coordination board (JTCB) – A group formed by the Joint Force Commander to accomplish broad targeting oversight functions that may include, but are not limited to, coordinating targeting information; providing targeting guidance, synchronization, and priorities; and approving the joint integrated prioritized target list.

joint task force (JTF) – A joint force that is constituted and so designated by the Secretary of Defense, a Combatant Commander, a subunified Commander, or an existing joint task force Commander.

line of communications (LOC) – A route, either land, water, and/or air, that connects an operating military force with a base of operations and along which supplies and military forces move.

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 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).

logistic control (LOGCON) (NATO) – The authority granted to a NATO Commander over assigned logistics units and organizations in the JOA, including national support elements (NSEs), that empowers him to synchronize, prioritize, and integrate their logistics functions and activities to accomplish the joint theater mission. It does not confer authority over the nationally owned resources held by NSEs, except as agreed in the transfer of authority or in accordance with NATO Principles and Policies for Logistics. (AJP 3)

logistics – Planning and executing the movement and support of forces.

main effort – The designated activity or subordinate organization whose mission at a given time is most critical to overall mission success. It is usually weighted with the preponderance of resources by the higher organization. (NTRP 1-02)

major operation – 1. A series of tactical actions (battles, engagements, strikes) conducted by combat forces, coordinated in time and place, to achieve strategic or operational objectives in an operational area. 2. For noncombat operations, a reference to the relative size and scope of a military operation.

maneuver – 1. A movement to place ships, aircraft, or land forces in a position of advantage over the enemy. 2. A tactical exercise carried out at sea, in the air, on the ground, or on a map in imitation of war. 3. The operation of a ship, aircraft, or vehicle, to cause it to perform desired movements. 4. Employment of forces in the operational area through movement in combination with fires and information, to achieve a position of advantage in respect to the enemy.

maritime dynamic target (MDT) – A Joint Force Maritime Component Commander-designated target requiring immediate response because it poses (or soon will pose) a danger to friendly forces or it is a highly lucrative, fleeting target of opportunity. (NTRP 1-02)

maritime interception operations (MIO) – Efforts to monitor, query, and board merchant vessels in international waters to enforce sanctions against other nations such as those in support of United Nations Security Council Resolutions and/or prevent the transport of restricted goods.

NATO doctrine refers to these operations as 'Maritime Interdiction Operations.' (AJP 3)

maritime operations center (MOC) – The collective name for the boards, bureaus, cells, centers, and working groups that execute the maritime headquarters maritime operations functions. (NTRP 1-02)

maritime security operations (MSO) – Those operations to protect maritime sovereignty and resources and to counter maritime-related terrorism, weapons proliferation, transnational crime, piracy, environmental destruction, and illegal seaborne immigration.

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.

measure of effectiveness (MOE) – An indicator used to measure a current system state, with change indicated by comparing multiple observations over time.

measure of effectiveness indicators (MOEIs) – A unit, location, or event observed or measured, that can be used to assess a measure of effectiveness, often used to add quantitative data points to qualitative measures of effectiveness and can assist an information operations staff or cell in answering a question related to a qualitative measure of effectiveness. (NWP 5-01)

measure of performance (MOP) – An indicator used to measure a friendly action that is tied to measuring task accomplishment.

military information support operations (MISO) – Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals in a manner favorable to the originator's objectives.

mine warfare (MW) – The strategic, operational, and tactical use of mines and mine countermeasures either by emplacing mines to degrade the enemy's capabilities to wage land, air, and maritime warfare or by countering of enemy-emplaced mines to permit friendly maneuver or use of selected land or sea areas.

mission – 1. The task, together with the purpose, that clearly indicates the action to be taken and the reason therefor. 2. In common usage, especially when applied to lower military units, a duty assigned to an individual or unit; a task. 3. The dispatching of one or more aircraft to accomplish one particular task.

named area of interest (NAI) – The geospatial area or systems node or link against which information that will satisfy a specific information requirement can be collected, usually to capture indications of adversary courses of action.

navy component commander (NCC) – The Commander of a naval component assigned or attached to a joint force (unified command) constituted and so designated by the Joint Chiefs of Staff or by a Commander of an existing unified command that was established by the Joint Chiefs of Staff. (NTRP 1-02)

noncombatant evacuation operation (NEO) – An operation whereby noncombatant evacuees are evacuated from a threatened area abroad, which includes areas facing actual or potential danger from natural or manmade disaster, civil unrest, imminent or actual terrorist activities, hostilities, and similar circumstances, that is carried out with the assistance of the Department of Defense.

objective – 1. The clearly defined, decisive, and attainable goal toward which an operation is directed. 2. The specific goal of the action taken which is essential to the Commander's plan.

operation – 1. A sequence of tactical actions with a common purpose or unifying theme. 2. A military action or the carrying out of a strategic, operational, tactical, service, training, or administrative military mission.

operational access – The ability to project military force into an operational area with sufficient freedom of action to accomplish the mission.

operational art – 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.

operational command (OPCOM) (NATO) – The authority granted to a Commander to assign missions or tasks to subordinate Commanders, to deploy units and to reassign forces, and to retain or delegate operational and/or tactical control as the commander deems necessary. It does not of itself include responsibility for administration or logistics. Beside full command the gaining commander may task organize only under OPCOM the assigned unit and thus assign separate missions to it and its component parts. A commander may employ assigned forces under OPCOM for any purpose. (AJP 3)

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 necessary to accomplish the mission.

operational control (OPCON) (NATO) – The authority delegated to a Commander to direct forces assigned so that the Commander may accomplish specific missions or tasks, which are usually limited by function, time, or location and to deploy units concerned, and to retain or assign tactical control to those units. It does not include authority to assign separate employment of components of the units concerned. Neither does it, of itself, include administrative or logistic control. (AJP 3)

operational design – The conception and construction of the framework that underpins planning.

operational intelligence – Intelligence that is required for planning and conducting campaigns and major operations to accomplish strategic objectives within theaters or operational areas.

operational level of warfare (OLW) – The level of warfare at which campaigns and major operations are planned, conducted, and sustained to achieve strategic objectives within theaters or other operational areas.

operational reach – The distance and duration across which a force can successfully employ military capabilities.

operation order (OPORD) – A directive issued by a Commander to subordinate Commanders for the purpose of effecting the coordinated execution of an operation.

Operation Plan (OPLAN) – Level 4 Planning Detail. 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 concept of operations (CONOPS), all applicable annexes, a time-phased force and deployment list (TPFDL) and a transportation-feasible notional time-phased force and deployment data (TPFDD), as well as analysis of the impact of a potentially contested environment on the joint deployment and distribution enterprise (JDDE).

operations security (OPSEC) – A capability that identifies and controls critical information, indicators of friendly force actions attendant to military operations, and incorporates countermeasures to reduce the risk of an adversary exploiting vulnerabilities.

ordered departure – 1. A procedure by which the number of United States Government personnel, their dependents, or both are reduced at a Foreign Service post. 2. Mandatory departure of some or all categories of personnel and dependents to designated safe havens as directed by the Department of State, with the implementation of the theater evacuation plan.

permissive environment – Operational environment in which host country military and law enforcement agencies have control, as well as the intent and capability to assist operations that a unit intends to conduct.

planning order (PLANORD) – A planning directive that provides essential planning guidance and directs the development, adaptation, or refinement of a plan/order.

priority intelligence requirement (PIR) – An intelligence requirement that the Commander and staff need to understand the threat and other aspects of the operational environment.

protection of shipping – The use of proportionate force, when necessary, for the protection of United States flag vessels and aircraft, United States citizens (whether embarked in United States or foreign vessels), and their property against unlawful violence.

raid – An operation to temporarily seize an area to secure information, confuse an enemy, capture personnel or equipment, or to destroy a capability culminating with a planned withdrawal.

reconnaissance – A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area.

request for information (RFI) – Any specific time-sensitive ad hoc requirement for intelligence information or products to support an ongoing crisis or operation not necessarily related to standing requirements or scheduled intelligence production. In Navy usage, a general term for an information request that can be used to meet an information need associated with an operation.

restraint – In the context of planning, a requirement placed on the command by a higher command that prohibits an action, thus restricting freedom of action.

rules of engagement (ROE) – Directives issued by competent military authority that delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered.

running estimate – A staff estimate, that is not static, but instead is continuously updated with new information as the operation proceeds. (NTRP 1-02)

safe haven – Designated area(s) to which noncombatant evacuees of the United States Government's responsibility and commercial vehicles and materiel may be evacuated during a domestic or other valid emergency.

sea control operations – The employment of forces to destroy enemy naval forces, suppress enemy sea commerce, protect vital sea lanes, and establish local military superiority in vital sea areas.

sea denial – Partially or completely denying the adversary the use of the sea with a force that may be insufficient to ensure the use of the sea by one's own forces. (NTRP 1-02)

sequel – The subsequent operation or phase based on the possible outcomes of the current operation or phase.

service component command – A command consisting of the Service component Commander and all those Service forces, such as individuals, units, detachments, organizations, and installations under that command, including the support forces that have been assigned to a Combatant Command or further assigned to a subordinate unified command or joint task force.

shaping actions – Those activities conducted by friendly forces designed to set conditions for the success of subsequent operations. Normally associated with supporting forces or efforts. (NTRP 1-02)

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. (NTRP 1-02)

show of force – An operation planned to demonstrate United States resolve that involves increased visibility of United States deployed forces in an attempt to defuse a specific situation that, if allowed to continue, may be detrimental to United States interests or national objectives.

specified task – In the context of planning, a task that is specifically assigned to an organization by its higher headquarters.

stability activities – Various military missions, tasks, and activities conducted outside the United States in coordination with other instruments of national power to maintain or reestablish a safe and secure environment and provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief.

staff estimate – A continual evaluation of how factors in a staff section's functional area support and impact the planning and execution of the mission.

strategic level of warfare – The level of warfare at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) strategic security objectives and guidance, then develops and uses national resources to achieve those objectives.

support – 1. The action of a force that aids, protects, complements, or sustains another force in accordance with a directive requiring such action. 2. A unit that helps another unit in battle. 3. An element of a command that assists, protects, or supplies other forces in combat.

supported commander – 1. The commander having primary responsibility for all aspects of a task assigned by Chairman of the Joint Chiefs of Staff Instruction 3110.01J, (U) 2015 Joint Strategic Capabilities Plan (JSCP), or other joint planning authority. 2. In

the context of joint planning, the Commander who prepares operation plans or operation orders in response to requirements of the Chairman of the Joint Chiefs of Staff. 3. In the context of a support command relationship, the Commander who receives assistance from another Commander's force or capabilities, and who is responsible for ensuring that the supporting Commander understands the assistance required.

supporting commander – 1. A Commander who provides augmentation forces or other support to a supported Commander or who develops a supporting plan. 2. In the context of a support command relationship, the Commander who aids, protects, complements, or sustains another Commander's force and who is responsible for providing the assistance required by the supported Commander.

supporting effort – The designated activity or subordinate organization(s) whose mission at a given time is designed to directly contribute to the success of the main effort. (NTRP 1-02)

surveillance – The systematic observation of aerospace, cyberspace, surface, or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means.

sustaining actions – Those activities conducted by friendly forces to provide logistics and personnel services. (NTRP 1-02)

sustaining effort – The designated activity or subordinate organization(s) whose mission is directed at sustaining friendly forces to continue or prepare for activity. (NTRP 1-02)

sustainment – The provision of logistics and personnel services required to maintain and prolong operations until successful mission accomplishment.

synchronization – 1. The arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive place and time. 2. In the intelligence context, application of intelligence sources and methods in concert with the operation plan to answer intelligence requirements in time to influence the decisions they support.

tactical command (TACOM) (NATO) – The authority delegated to a Commander to assign tasks to forces under his command for the accomplishment of the mission assigned by higher authority. (AJP 3)

tactical control (TACON) – The authority over forces that is limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish missions or tasks assigned.

tactical control (TACON) (NATO) – The detailed and, usually, local direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned. (AJP 3)

tactical level of warfare – The level of warfare at which battles and engagements are planned and executed to achieve military objectives assigned to tactical units or task forces.

target area of interest (TAI) – The geographical area where high-value targets can be acquired and engaged by friendly forces.

targeting – The process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities.

task – A clearly defined action or activity specifically assigned to an individual or organization that must be done as it is imposed by an appropriate authority.

time-sensitive target (TST) – A Joint Force Commander validated target or set of targets requiring immediate response because it is a highly lucrative, fleeting target of opportunity or it poses (or will soon pose) a danger to friendly forces.

uncertain environment – Operational environment in which host government forces, whether opposed to or receptive to operations that a unit intends to conduct, do not have totally effective control of the territory and population in the intended operational area.

warning order (WARNORD) – 1. A preliminary notice of an order or action that is to follow. 2. A planning directive that initiates the development and evaluation of military courses of action by a Commander.

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
APEX	Adaptive Planning and Execution
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
DEPOD	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
EOCA	Enemy Course of Action
ECOG	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)
F RTP	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
MOE-I	Measure of Effectiveness Indicator
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	Naval Network Warfare Command
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)
NTTP	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
SecDef	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

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