
UNITED STATES MARINE CORPS
THE BASIC SCHOOL
MARINE CORPS TRAINING COMMAND
CAMP BARRETT, VIRGINIA 22134-5019

AMPHIBIOUS PLANNING

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STUDENT HANDOUT

Amphibious Planning

Previous Material

You have become familiar with the basic tenets related to naval campaigning, naval fleet organization and current and future challenges across our warfighting functions in all domains. You have also reviewed applications of amphibious operations, different types of amphibious operations, characteristics of amphibious operations and the different types of tasking affecting the initiation and termination of amphibious operations.

Importance

You will almost certainly find yourself embarked upon naval amphibious shipping at some point in your Marine Corps career. Basic familiarity with the chief tenets of amphibious operations will ease your transition into the amphibious side of Marine Corps training and operations and enable you to more rapidly transition to leading your Marines effectively while on ship.

In This Lesson

This lesson will elaborate on the concepts introduced in the Amphibious Operations I and II platform classes. Now, you will learn about the Joint and Marine Corps doctrinal foundations of amphibious planning and how command and control (C2) is exercised throughout the course of an amphibious landing.

This lesson covers the following topics:

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Learning Objectives

Terminal learning objectives

TBS-OFF-2104 Given Marines, an amphibious ship, landing craft and landing plans, lead a platoon during amphibious operations to accomplish the mission.

Enabling learning objectives

TBS-OFF-2104h Without the aid of references, describe landing plan considerations without omission.

TBS-OFF-2104n Without the aid of references, define the rapid response planning process without omission.

Amphibious Planning Overview

Marine Corps amphibious planning processes, products and methods integrate doctrinal Marines Corps planning processes with operational and logistical considerations unique to conducting exercises and operations from naval shipping.

Key doctrinal publications detailing guidance on the amphibious planning process are the following:

Navy Tactics, Techniques and Procedures 3-02.1M (NTTP 3-02.1M)/Marine Corps Warfighting Publication 3-31.5

Joint Publication 3-02, Amphibious Operations

Joint Publication 3-02.1, Amphibious Embarkation and Debarkation

We will conduct a detailed review of the following aspects of amphibious planning:

-Planning objectives

-Planning methods

-Planning steps and products. The planning process associated with amphibious operations generates a considerable quantity of products – assignment tables, maps, charts, schedules, and such. We will conclude our review of amphibious planning products with a review of the contents of the doctrinal Landing Plan.

Amphibious Planning Objectives

JP 3-02 succinctly states the objective and complex nature of the amphibious planning process:

“The focus of the planning process...links the employment of the AF (Amphibious Force) to the attainment of operational and strategic objectives through the design, organization, integration, and conduct of the amphibious operation within the JFC’s (Joint Force Commander’s) overall operation or campaign. The nature of amphibious warfare gives rise to planning procedures that are both intricate and unique. This intricacy stems from the complex detail required to fully coordinate the landing of troops, equipment and supplies by air and surface means; maximize maneuver, speed and available fire support; and minimize the vulnerability of the AF. The uniqueness of amphibious planning stems from the interrelationships between the components of the AF between the AF, and the joint force, and between the AF and supporting organizations and agencies.” (JP 3-02, *Amphibious Operations* p. 36)

Amphibious planners might have to plan how to respond to a crisis that has rapidly developed in one part of the world. Or, they might be taking part in a major operation involving multiple units that has been planned for some time. The two following case studies illustrate different situations and missions amphibious planners have addressed in the past.

Case Study: Operation ODYSSEY DAWN

General Situation: Popular protests swept through the Middle East in early 2011 in the aftermath of the Egyptian and Tunisian popular uprisings. Libya was no exception to this, and the Qaddafi regime quickly moved to crush popular protest. United States military intervention in the Libyan civil war on 19 March was preceded by a progression of international initiatives to condemn actions taken by the Qaddafi regime. The United States and various European allies reversed a series of initiatives previously undertaken to normalize relations with Libya over the 17 February to 19 March time period. President Obama signed an executive order imposing targeted financial sanctions against the repressive Qaddafi regime. United States diplomatic and defense planners developed a series of options to inform policymakers on what could be done to deal with the Qaddafi regime.

Mid-March 2011 saw Qaddafi loyalists making gains against rebel forces in vicinity of Benghazi, Libya, on the Libyan coastline. The United Nations Security Council voted to authorize Security Council Resolution 1973 (UNSCR 1973) authorizing “all necessary measures” to protect Libyan civilians from regime forces. UNSCR 1973 prohibited foreign ground forces from occupying Libyan soil and also authorized the establishment and enforcement of a “no-fly zone” and arms embargo aimed at curtailing the repressive regime’s ability to harm Libyan citizens.

Case Study: Operation ODYSSEY DAWN (Continued)

The United States initiated Operation ODYSSEY DAWN on 19 March 2013. The first missile strikes of the campaign were intended to destroy Qaddafi's anti-air capabilities in order to set conditions for manned flights over Libyan soil to enforce the no-fly zone and target Qaddafi's ground forces. (Institute for the Study of War, "*The Libyan Revolution: Escalation and Intervention*", by Anthony Bell and David Witter, September 2011, p. 6-8)

Mission: The 26th MEU, along with all MEUs, trains prior to and during deployment to conduct specific types of missions. The Tactical Recovery of Aircraft Personnel (TRAP) mission is a key MEU mission. Marines from the MEU Ground Combat Element train to and maintain proficiency in this mission prior to and during deployment. The 26th MEU had the opportunity to put this training into action during the early morning of 22 March 2011 when an American aircraft experienced engine difficulties in vicinity of Benghazi. Marines from the 26th MEU successfully recovered (1) United States Air Force (USAF) pilot who had ejected from his stricken aircraft late at night on 21 March. All told, the downed pilot was in American hands back on the USS Kearsarge in under four hours after he ejected.

Summary: The successful recovery of the F-15E pilot during Operation ODYSSEY DAWN illustrates the utility of a planning process adaptable to time-critical missions and requirements. However, it is doubtful the 26th MEU would have been able to accomplish this successful TRAP mission without having conducted the mission rehearsals that were part of the MEU pre-deployment workup schedule. These rehearsals help establish, refresh, and reinforce the SOPs that MCWP 5-1 identifies as critical contributing factors to the success of any planning process.

Case Study: Operation DESERT STORM

Situation: Numerous factors propelled Saddam Hussein's Iraq towards war with Kuwait and, eventually, a multinational force under American command. Saddam Hussein wanted to accomplish a number of objectives by attacking Kuwait:

- Seize Kuwaiti oil wealth
- Pay off foreign debts
- Obtain access to the Persian Gulf
- Gain a dominant position in the Middle East

Case Study: Operation DESERT STORM (Continued)

The international response was swift and decisive. The United States rallied the international community and began a five and a half month operation called DESERT SHIELD in August 1990 that eventually saw 540,000 Allied personnel staged in the Middle East. These troops were from over 31 countries and participated in one of the most successful military campaigns in history.

United States Marines played a pivotal role in the conflict on land and sea. As we will see, Marines afloat conducted numerous amphibious demonstrations to convince the Iraqi armed forces that their positions in Kuwait were to be assaulted by the sea. Although the Marine Corps did not conduct an actual amphibious assault in the Gulf War, the presence and active rehearsals of the Marines embarked on these ships was a key part of General Schwarzkopf's strategy to divert Iraqi attention away from their western flank and expose them to a "left hook" movement by heavily armored Allied units including the US Army's 7th Corps.

Timeline:

Date	Event
2 August 1990	Iraq invades Kuwait with Republican Guard forces, regular mechanized army forces and Special Forces. The fight for Kuwait City begins at 0530 and is over at 1400.
3 August 1990	American national security planners convene the National Security Council to brief the President. US intelligence reports that Iraqi reinforcements are moving into Kuwait and that Iraqi armored forces are deploying on the Saudi border.
4 August 1990	General Schwarzkopf briefs the President that 17 weeks are required to build up sufficient combat power to attack Iraqi forces.
6 August 1990	UN Security Council condemns the invasion and imposes economic sanctions on Iraq.
6 August 1990	82 nd Airborne receives "execute" order and preps to deploy to provide security in Saudi Arabia.
6 August 1990	The 26 th MEU loads at Morehead City, North Carolina onto Amphibious Squadron TWO.
7 August, C-Day	Deployment order for Southwest Asia issued. Units alerted: 101 st Airborne Division, 1 st Cavalry Division, USAF 1 st Tactical Fighter Wing.
8 August 1990	US Maritime Prepositioning Squadron TWO (MPSRON-TWO) departs Diego Garcia. MPSRON-THREE vessels depart Guam and Saipan.
9 August 1990	First 82 nd Airborne personnel on deck in Saudi Arabia.

Case Study: Operation DESERT STORM (Continued)

Timeline (Continued):

Date	Event
10 August 1990	USAF jets commence Combat Air Patrols over Saudi Arabia.
11 August 1990	Military sealift command ships arrive to load in Savannah, Georgia.
11 August 1990	7 th Marine Expeditionary Brigade (MEB) starts deployment from MCB 29 Palms. (250) C-141 sorties needed to move the 17,000-strong MEB.
14 August 1990	I MEF and 7 th MEB personnel start arriving in Saudi Arabia. Sealift ships depart Savannah, Georgia.
15 August 1990	Headquarters, Marine Corps (HQMC) reports that 45,000 personnel will deploy to the Gulf. First MPSRON-TWO ships arrive in Saudi Arabia.
17 August 1990	LtGen Boomer, CG of I MEF, arrives in Saudi Arabia.
19 August 1990	7 th MEB positioned and ready to fight to defend Saudi Arabia. 22 nd MEU relieved by 26 th MEU off the coast of Liberia.
20 August 1990	26 th MEU directed to proceed to the Mediterranean Sea.
24 August 1990	US Embassy in occupied Kuwait City closed. Personnel (including Marine guards) moved to Baghdad.
26 August 1990	MPSRON-THREE arrives in Saudi Arabia.
3 September 1990	III Marine Aircraft Wing (MAW) HQ established in SW Asia.
6 September 1990	1 st Marine Division, 3d MAW, 1 st Force Service Support Group deployed to Saudi Arabia.
7 September 1990	13 th MEU arrives in Gulf of Oman.
11 September 1990	4 th Marine Expeditionary Brigade arrives in the Gulf of Oman.
17 September 1990	4 th MEB preps to conduct amphibious landing rehearsals that will be named "SEA SOLDIER".
30 October 1990	4 th MEB begins military exercises and amphibious rehearsals off the coast of Oman.
8 November 1990	President Bush approves deployment of additional II MEF and 5th MEB forces to Saudi Arabia.
1 December 1990	5 th MEB departs San Diego.
8 December 1990	4 th MEB continues exercises off the coast of Oman. Exercise is code-named SEA SOLDIER III and includes an amphibious assault and heliborne assault.

Case Study: Operation DESERT STORM (Continued)

Timeline (Continued):

9 December 1990	Initial elements of II MEF arrive in Saudi Arabia.
14 December 1990	SEA SOLIDER III continues with over 3400 Marines landed.
26 January 1991	SEA SOLDIER IV commences and Marines located near Oman rehearse for possible landing on Kuwaiti coastline.
17 January 1991	Operation DESERT STORM begins with air strikes against Iraqi positions. The air war will continue until ground combat operations commence on 24 February.
28 February 1991	Cease fire in effect at 0800 between Allied and Iraqi forces.

(Above timeline is sourced from *Operation Desert Shield/Desert Storm: Chronology and Fact Book* by Kevin Don Hutchinson and the PBS Frontline Gulf War chronology located at <http://www.pbs.org/wgbh/pages/frontline/gulf/cron/>)

Summary:

General Norman Schwarzkopf's campaign plan as developed in October 1990 dictated two main roles for Marine Corps forces deployed in the Gulf:

-Marine forces ashore would attack into Kuwait to convince the Iraqis that the main effort attack would be into Kuwait.

-Marine forces afloat would threaten an amphibious landing along the coast of Kuwait to keep the enemy oriented on the sea and not on the western desert area where the Army's VII Corps would attack.

American commanders loudly publicized the SEA SOLDIER series of amphibious exercises and made a strong effort to attract attention to the possibility of an amphibious assault into Kuwait as well. (*Desert Storm at Sea: What the Navy Really Did* by Marvin Pokrant) Although Marines did not execute an opposed amphibious landing during DESERT STORM Marine planners were still deeply engaged with planning various amphibious demonstrations in accordance with the overall Allied campaign plan.

Marine Corps Planning Methods

Marine planners employed several different planning processes to solve the problems and accomplish the tasks associated with executing Operation ODYSSEY DAWN and Operation DESERT SHIELD/STORM successfully. It is true that you have not yet trained to conduct a TRAP mission, planned how to conduct an air assault, or planned how to configure and maneuver a Marine Expeditionary Force (MEF) to defeat the enemy. **You have, however, trained how to conduct a certain type of proper planning at The Basic School!**

Marine Corps Planning Methods (Continued)

Think back to all the sand table exercises, tactical decision games and field exercises you have participated in since arriving at The Basic School. You have been employing a particular type of planning process to accomplish tasks at the level of the rifle platoon – the tactical level of war. You grasp the importance of planning as it relates to mission success and understand what the foundational Marine Corps publication dealing with planning processes, *Marine Corps Warfighting Publication 5-1: Marine Corps Planning Process (MCWP 5-1)* means when it states the following:

“...an essential function of planning is to promote understanding of the problem—the difference between existing and desired conditions— and to devise ways to solve it. Planning involves elements of both art and science, combining analysis and calculation with intuition, inspiration, and creativity.” (MCW P 5-1 p. 1-1)

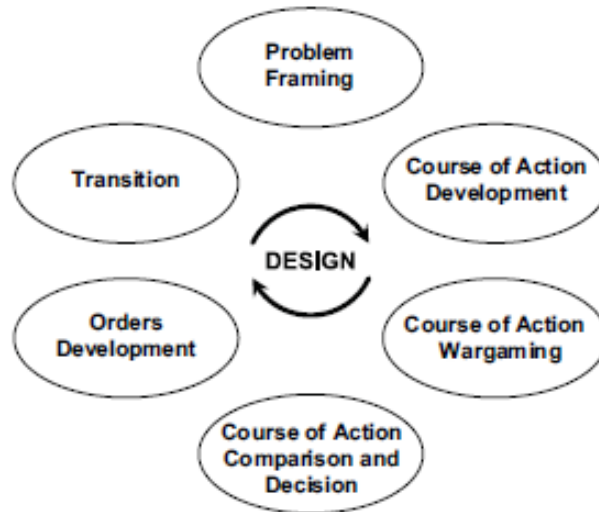
MCW P 5-1 proceeds to detail the different Marine Corps planning processes that we use to solve problems and accomplish the mission. The first planning process is one with which you are closely familiar:

-Troopleading steps. Small unit leaders utilize the six troop leading steps detailed in the BAMCIS acronym (**B**egin the planning, **A**rrange reconnaissance, **M**ake reconnaissance, **C**omplete the plan, **I**ssue the order, **S**upervise). A higher echelon staff comprised of operations, logistics, communications, and intelligence planners is not significantly involved in this planning process. (MCW P 5-1 p. 1-1) As you will learn, Marines plan at levels above the immediate tactical level of war associated with the BAMCIS troopleading steps.

This is the only planning process you have utilized thus far at TBS. However, out in the Fleet you will be involved in planning processes tailored to develop viable courses of action for the MAGTF-level missions you will be executing in training and on deployment:

-Marine Corps Planning Process (MCP). Marine Corps staffs utilize MCP to conduct detailed planning over a six step process. The six steps are detailed below:

Marine Corps Planning Methods (Continued)



Planners utilizing MCPP follow the below steps when solving problems and planning to accomplish the mission:

1. **Problem framing.** *“This step identifies what the command must accomplish, when and where it must be done and, most importantly, why—the purpose of the operation. The purpose of the operation, which is enduring, is restated and amplified as desired in the commander’s intent...Since no amount of subsequent planning can solve a problem insufficiently understood, problem framing is the most important step in planning.”* Simply put, any plan is fatally flawed if planning progresses from inadequate understanding of the task at hand. (MCW P 5-1 p. 1-5)

2. **COA Development.** *“The COA development step produces options for accomplishing the mission in accordance with commander’s intent. It provides options for the commander; refines the design; and promotes understanding of the environment, problem, and the approach to solving the problem.”* The aim of this step is to begin to develop a course of action (COA) that may be implemented via eventual operation order issue. (MCW P 5-1 p. 1-5)

3. **COA Wargaming.** The planning staff will assess their planning and thought processes associated with COA development by assessing how their plan would address various enemy actions during this stage. According to MCW P 5-1, the war game step *“examines and refines the option(s) in light of adversary capabilities and potential actions/reactions as well as the characteristics peculiar to the operating environment...This detailed examination of the operational environment and possible adversary reactions should forge a greater understanding of the environment, the problem, and possible solutions.”* (MCW P 5-1 p. 1-5)

Marine Corps Planning Methods (Continued)

4. **COA Comparison and Decision.** This is the step during which the unit commander will weigh various COAs as developed by the planning staff and identify a COA to use for orders development. Essentially, *“...the commander reviews the pros and cons of the option(s) and decides how he will accomplish the mission, either by approving a COA as formulated or by assimilating what has been learned into a new COA that may need to be further developed and waged.”* (MCW P 5-1 p. 1-5)

5. **Orders Development.** Planners and commanders translate the selected COA into an executable operation *“sufficient to guide implementation and initiative by subordinates.”* (MCW P 5-1 p. 1-5)

6. **Transition.** The focus of action shifts from planning to execution during this step. The transition step may involve *“...a wide range of briefs, drills, or rehearsals necessary to ensure a successful shift from planning to execution. A number of factors can influence how the transition step is conducted, such as echelon of command, mission complexity, and, most importantly, available time.”* This step is where the plan is put into action. MCW P 5-1 identifies **time** as a key factor that determines what actions will be taken in this step. (MCW P 5-1 p. 1-5)

-Rapid Response Planning Process (R2P2). MCW P 5-1 identifies **time** as a key factor governing actions taken during the transition phase of MCPP. **R2P2 is designed to take 6 hours or less.** The “no later than” time window identified in a mission may preclude the employment of the full, six step MCPP planning process in certain situations. Commanders and staffs will employ an abbreviated planning process tailored to produce a COA in a compressed time frame. R2P2 steps are essentially identical to MCPP – however, successful execution of this planning process relies on the following:

- An understanding of the MCPP.
- Detailed preparation, training, and organization of the force and equipment.
- Intelligence and mission planning products developed previously.
- Current intelligence information.
- Refined, well-rehearsed SOPs.

(MCW P 5-1 p. H-1)

Think about how Marine planners worked to execute tasks associated with the ODYSSEY DAWN TRAP mission and DESERT STORM amphibious operation. Clearly, planners were operating under a different set of time considerations during each operation. Think about how much training the ODYSSEY DAWN MEU must have conducted prior to deployment on TRAP missions and think about how detailed Marine planners must have been while conducting DESERT STORM planning.

Amphibious Planning Methods

Marine planners involved in amphibious operations employ two planning methods: **deliberate planning** and **crisis action planning**. Marine planners conducting deliberate planning and crisis action planning utilize the six steps of MCPP to develop COAs and operation orders. Each planning method can complement each other – a commander's staff might conduct deliberate planning in order to generate a COA needed to address a future, hypothetical scenario. Planners can then transition to crisis action planning as time draws near to mission execution in order to adapt a selected course of action to the real- world scenario. (MCW P 3-31.5/NTTP 3-02.1M p. 3-2)

-Deliberate planning. Per Marine Corps and Navy doctrine, staffs utilize MCPP to conduct deliberate planning at the Marine Expeditionary Brigade (MEB) and Marine Expeditionary Force (MEF) level. According to MCW P 3-31.5/NTTP 3-02.1M p. 3-2, “*Ship to Shore Movement*”:

“Deliberate planning occurs in response to a hypothetical situation or a situation that develops over an extended period of time. It is performed well in advance of expected execution, often during peacetime or before initiating a deliberate operation. Deliberate planners rely heavily on assumptions regarding the circumstances that will exist when the plan is executed.”

-Crisis action planning. Our doctrine defines crisis action planning, or CAP, as: “...*time-sensitive planning for the deployment, employment, and sustainment of assigned and allocated forces and resources that occurs in response to a situation that may result in actual military operations.*” Marine planners work with “...*the conditions and circumstances that exist at the time the planning occurs. CAP is usually less formal than deliberate planning and more responsive to changing events.*” (MCW P 3-31.5/NTTP 3-02.1M p. 3-3)

CAP is also known as R2P2 during Marine Expeditionary Unit (MEU) operations. As previously discussed, the intent of R2P2 is to facilitate mission execution in a compressed time frame. Per our doctrine, **the goal of R2P2 on a deployed MEU is to facilitate mission execution within six hours of warning order or alert order receipt.** This capability is what makes the MEU structure and organization so unique and such a crucial part of our nation's ability to respond to contingencies as they develop in any part of the world.

-Primary Decision Responsibilities. MCW P 3-31.5 teaches us that the cornerstone of amphibious operations is the previously described six-step planning process. This process is applicable to operations of any size or type and provides logical procedures to follow upon receipt of the order initiating and amphibious operation.

-Primary Decision Responsibilities (Continued). The process also provides ATF and LF commanders and their staffs with a means to organize planning activities, transmit plans to subordinate commands, and share a common understanding of the mission and the commander's intent.

Amphibious Planning Methods (Continued)

The process enhances commander's ability to make the primary decisions in most amphibious operations. The below chart details those decisions and the commander responsible for them.

Primary Decision	May Be Contained in Order Initiating Amphibious Operation	Decision	Decision Made Not Later than Planning Step
Determine AF	X	Mutual	1 (Mission Analysis)
Select AF Objectives	X	Mutual	1 (Mission Analysis)
Determine COAs for development	X	Mutual	2 (COA Development)
Select COA		Mutual	4 (COA
Select Landing Areas		Mutual	4 (COA
Select Landing Beaches		Mutual	4 (COA
Determine Sea Echelon Plan		ATF Commander	4 (COA Comparison/Decision
Select LF Objectives		LF Commander	4 (COA
Select LZs and Drop		LF Commander	4 (COA
Select Date and Hour of Landing	X	Mutual	4 (COA Comparison/Decision

Amphibious Planning Steps

The coordination, communication and planning required to carry out an amphibious exercise or operation is considerable. **The landing plan is the “final expression” of all amphibious ship to shore movement planning.** JP 3-02 states:

“Ship to shore movement planning for the AF (amphibious force) is given final form and expression in the landing plan. The landing plan is designed to support the LF's (landing force's) CONOPS (concept of operations), keeping mind the inherent capabilities and operational characteristics of available amphibious warfare ships and landing craft.” (JP 3-02, p. 67)

Planners, however, cannot immediately begin formulating a landing plan after receipt of a mission order. First, they need to plan a ground scheme of maneuver that landing elements will execute after conducting movement from ship to shore. JP 3-02 outlines the steps amphibious planners need to take prior to developing a landing plan:

- 1. Landing force scheme of maneuver ashore identified.**
- 2. Commander, Landing Force identifies support requirements and Navy assets needed.**

Amphibious Planning Steps (Continued)

3. **Commander, Amphibious Task Force identified additional Navy assets needed.**
4. **Commander, Amphibious Task Force identifies if more assets required and requests from higher authority.**
5. **Plans adjusted to match assets available.**
6. **Final allocation of means.**
7. **Detailed landing plan developed.**

A key concept governing the generation of the landing plan is **sequence**. Planning for ship to shore movement aims to develop the sequence and order in which Marine elements land on their objective. Specifically, the landing plan establishes relative landing priorities among landing force elements and provides:

1. **Priority for landing of elements of the landing force.** This is a crucial aspect of amphibious planning. Planners must link their landing force priorities and the order in which forces flow ashore to an objective to their scheme of maneuver.
2. **Allocation of resources.**
3. **Allocation of serial numbers.** The serial number is a designator assigned to units assigned to go ashore as part of an amphibious exercise and is used to identify what each unit tasked to debark shipping is supposed to do while on ship.
4. **Sequence of landing of non-scheduled units.**
5. **Coordination of landing of separate landing groups.**

(JP 3-02 p. 70)

The Landing Plan

Amphibious Task Force commander product responsibilities are as follows (MCW P 3-31.5 p. 3-10)

Naval Landing Plan – Organizes the landing area to facilitate the conduct and control of ship to shore movement, offload the LF, and provide for medical regulating (MEDREG).
Landing Craft Availability Plan – A table that lists the type and number of landing craft available from each amphibious ship, and is categorized by total landing craft for naval and LF use.
Landing Craft Employment Plan – The landing craft employment plan is prepared by the Central Control Officer (CCO) in conjunction with the Naval Beach Group (NBG) support element Officer in Charge (OIC).
Debarkation Schedule – Provides for the timely and orderly debarkation of troops and equipment, and emergency supplies for surface borne ship to shore movement.
Ship's Diagram
Pontoon Causeway Plan
Unloading Plan – This plan establishes the sequence and designates the means for offloading the LF. It consists of the Landing Craft Availability Table and the Landing Craft Employment Plan.
Approach Schedule – The approach schedule indicates, for each scheduled wave, the times of arrival/departure from various points including the parent ship and rendezvous area.
Assault Wave Diagram – This diagram displays scheduled waves, landing craft, control ships (if assigned), on-call waves, and floating dumps as they appear at H-hour.
Landing Area Diagram – Provides the overall picture of seaward approaches in the landing area and overlays an appropriate scale chart.
Transport Area Diagram – The transport area diagram overlays an appropriate scale chart that shows the area from the beach to 1000 yards seaward of the outermost transport area anchorage or underway sector.
Beach Approach Diagram – Typically used during MEB and MEF sized operations. The beach approach diagram is an overlay for a large scale chart and shows the position of control ships and landing craft in vicinity of the LD after the last scheduled wave has landed, and identifies boat lanes for on call waves and subsequent serials.

The Landing Plan (Continued)

Sea Echelon Area – Provides for the dispersion of amphibious shipping and establishes the sea echelon area. A sea echelon is a portion of the amphibious shipping that withdraws from, or remains out of, the transport area during a landing or an operation.

Landing Control Plan – Organizes the landing area into operating and control areas to regulate and deconflict the movements of amphibious shipping, launch landing craft and aircraft, establish control areas, points, and stations for the surface borne and airborne ship to shore movements and provide operating areas for supporting forces protecting the landing area.

Medical Regulating Plan – The ATF Surgeon provides the operation order medical section to the ATF to ensure mutual support and fulfillment of medical requirements to include patient movement. Concurrent medical planning is essential across all phases of an operation to address HSS considerations in a timely, effective, and coordinated manner, and to ensure adequate and sustainable health care in theater.

Amphibious Assault Bulk Fuel System and Offshore Petroleum Discharge System Plan

Landing Force Commander Landing Plan product responsibilities are as detailed below (MCWP 3-31.5 p. 3-10)

Landing Force Landing Plan – Compilation of detailed plans prepared by the LF. Designates the forces going ashore, and promulgates the means, organization, sequence and landing priorities. The landing plan allocates blocks of serial numbers to subordinate commands, correlates the landing sequence for units not landed with the GCE and landing prior to general unloading and coordinates GCE landing plans.

Amphibious Vehicle Availability Table – Prepared by a GCE representative. Lists the number and type of amphibious vehicles available for landing, LF units embarked in them, and the ships carrying them.

Landing Craft and Amphibious Vehicle Assignment Table – Organizes the LF surface borne assault echelon into boat teams and assigns boat teams to scheduled waves, on call waves, and nonscheduled units. This document and the debarkation schedule provide ship commanders with the information needed for debarking troops. Typically used for MEB and MEF level operations and can be modified for smaller scale operation.

Landing Diagram – Depicts the tactical employment of boat teams in scheduled waves. It provides the wave composition that shows AAVs, landing craft, and boat teams, as well as touchdown times for landing beaches and Cushion Landing Zones (CLZs).

The Landing Plan (Continued)

Landing Force Serial Assignment Table – Lists in numerical order the serial numbers of units landed prior to general unloading.

Landing Priority Table – Worksheet used by the LF Commander and planners to show the planned buildup of forces ashore. Based on the LF CONOPS and provides the basis for the phased deployment of LF units ashore.

Landing Force Sequence Table - The LF landing sequence table is a complete listing of the estimated landing sequence of nonscheduled units (including CS, CSS, and aviation units). It is the principal document used by control agencies in directing the ship-to-shore movement of these units.

Assault Schedule - This schedule provides the formation, composition, and timing of scheduled and on-call waves. When preparing this schedule, the GCE commander considers subordinate commanders' recommendations regarding numbers of waves directed to designated beaches, as well as numbers and types of amphibious vehicles and landing craft in each wave.

Amphibious Vehicle Employment Plan - This plan shows the planned employment of AAVs and Lighter, Amphibious Resupply, Cargo (LARC) in the operation, including their employment after arrival at the beach. The GCE commander considers subordinate commanders' recommendations when preparing the plan in addition to information contained in the landing diagram and assault schedule.

Helicopter Availability Table - The helicopter availability table shows the number of helicopters available for the airborne ship-to-shore movement. It lists helicopter units and their call signs, the number of aircraft available for the initial and subsequent trips, aircraft model, parent aircraft transport ship, maximum deck launch spots available on each platform, and tentative load capacity.

Heliteam Wave and Serial Assignment Table - The HW SAT specifies the troop units, supplies, and equipment to be loaded into each aircraft. It identifies each heliteam by serial number with the wave number and aircraft position in the wave.

Helicopter Enplaning Schedule

Helicopter Landing Diagram - The helicopter landing diagram graphically displays routes to and from LZs. It shows the Helicopter Transport Areas (HTA), Rendezvous Points (RPs), Departure Points (DPs), approach and retirement routes, other Control Points (CPs), Landing Zones (LZs), and remarks for clarity. The diagram is prepared by a MAGTF Command Element (CE) representative in coordination with the Helicopter Coordination Section (HCS) and the helicopter transport group/unit commander.

The Landing Plan (Continued)

Helicopter Employment and Assault Landing Table - The HEALT is a detailed plan for the movement of helicopterborne troops, equipment, and supplies. It is the landing timetable for the airborne ship-to-shore movement and specifies the assignment of serials to helicopters for scheduled on-call waves. This document is the basis for preparing flight schedules and is used by the primary Amphibious Air Traffic Control Center (AATCC) to coordinate helicopter movements. The HEALT is prepared by the MAGTF in coordination with the AATCC and other ATF planners to ensure deconfliction with any planned supporting fires.

Ground Combat Element Landing Plan - The GCE commander and the GCE staff conduct the majority of LF detailed planning for ship-to-shore movement. The ATF and LF commanders provide the following information to subordinate units before planning begins.

Consolidated Landing and Approach Plan

Aviation Combat Element and Landing Force Aviation Landing Plan- In most operations, the ACE operates from the sea base comprised of the amphibious ships. The tactical situation or size of the operation may require that ACE units operate simultaneously from the sea base and land-based sites to support the MAGTF. In this case, the ACE/LF aviation landing plan outlines the ACE commander's plans for establishing aviation units ashore by air and surface means.

Embarkation Planning Considerations

Embarkation planning involves all the measures necessary to ensure timely and effective loading and off-loading of the amphibious force. Embarkation planning must begin early, proceed concurrently, and be coordinated with other planning. It requires coordination between forces, including detailed knowledge of the characteristics, capabilities, and limitations of ships, and the troops, supplies and equipment to be embarked. (JP 3-02 p. ix).

Joint and Marine Corps doctrine identifies several key principles related to embarkation planning and allocates embarkation planning responsibilities between the CATF and the CLF. The goal is to facilitate the timely and efficient embarkation of the amphibious force on embarkation day and the key to this success is the close working relationship that must exist between LF operations and logistics officers and their naval counterparts. Embarkation planners receive operational direction from the LF Operations staff in the form of several documents including the Landing Plan.

Key **principles of amphibious embarkation planning** are as follows:

Embarkation planning must support the tactical plan. Embarkation planning must provide for unit self-sufficiency. Embarkation planning must provide for dispersion. Embarkation planning responsibilities are **delineated between the CATF and CLF** in the following manner:

Embarkation Planning Considerations (Continued)

CATF embarkation planning responsibilities:

- Allocate assault shipping and sealift
- Provide Ship's Loading and Characteristics Pamphlet (SLCP) to the CLF
- Organize Navy forces for embarkation
- Prepare movement orders for ships
- Approve LF embarkation and loading plans
- Plan for external support

CLF embarkation planning responsibilities

- Determine LF requirements for assault shipping
- Develop LF organization for embarkation
- Determine embarkation support requirements
- Prepare detailed embarkation and loading plans

Additional planning considerations related to amphibious embarkation planning are as follows:

- The mission of the amphibious force
- Limiting dates of embarkation rehearsal, movement and action
- Size and characteristics of the force involved, both LF and naval, to include availability and characteristics of shipping and quantity/types of materiel to be embarked.
- Availability of ship to shore movement assets
- Selection of embarkation areas and points
- Marshalling area requirements
- Planning factors related to utilizing helicopter lift

Following receipt of the initiating directive for the amphibious operation, LF embarkation planning begins at all echelons and proceeds concurrently with operational planning. Major steps between embarkation and operational planning overlap but are usually accomplished in the following general sequence. **Key planning documents and products are identified in bold.**

1. Liaison between the corresponding Navy, LF and other forces is established by the CATF and the CLF.
2. Lift requirements from LF subordinate units are obtained by the CLF. These lift requirements are used to establish the LF shipping requirements.
3. CATF obtains lift requirements from Naval forces and other forces that will embark in LF spaces and provides these requirements with recommended locations to the CLF for inclusion into the LF assignment to shipping planning.
4. Shipping requirements to support the force echelonment are determined by the CLF and then submitted to the CATF.

Embarkation Planning Considerations (Continued)

5. The CATF allocates shipping to the LF and organizes this shipping to satisfy the LF's organization for embarkation. Then, the CLF allocates the shipping to subordinate embarkation echelons. Allocation for shipping is published in the **Organization for Embark and Assignment to Shipping** worksheet.
6. **Ship's Loading and Characteristics Pamphlets** are distributed by the CATF to the CLF.
7. The LF organization (to include attached naval units) for embarkation is established by the CLF in coordination with the CATF.
8. The Navy organization for embarkation is established by the CATF in coordination with the CLF.
9. Embarkation areas are selected and prepped by the CATF and CLF.
10. LF marshalling areas are selected and prepared by the CLF.
11. Control, security, communications, facilities and MHE requirements for the embarkation phase are determined by the CATF and CLF.
12. The Berthing and Loading Schedule is jointly developed and promulgated by the CATF and the CLF.
13. Movement schedules for LF personnel, supplies and equipment to the embarkation areas are developed by the CLF.
14. **Embarkation plans and detailed loading plans** are prepped, reviewed, approved, and promulgated by the CATF and the CLF.
15. External logistic support needed for the loading/offloading of embarked forces assets is coordinated by the CLF in conjunction with the CATF.

Key Embarkation Products

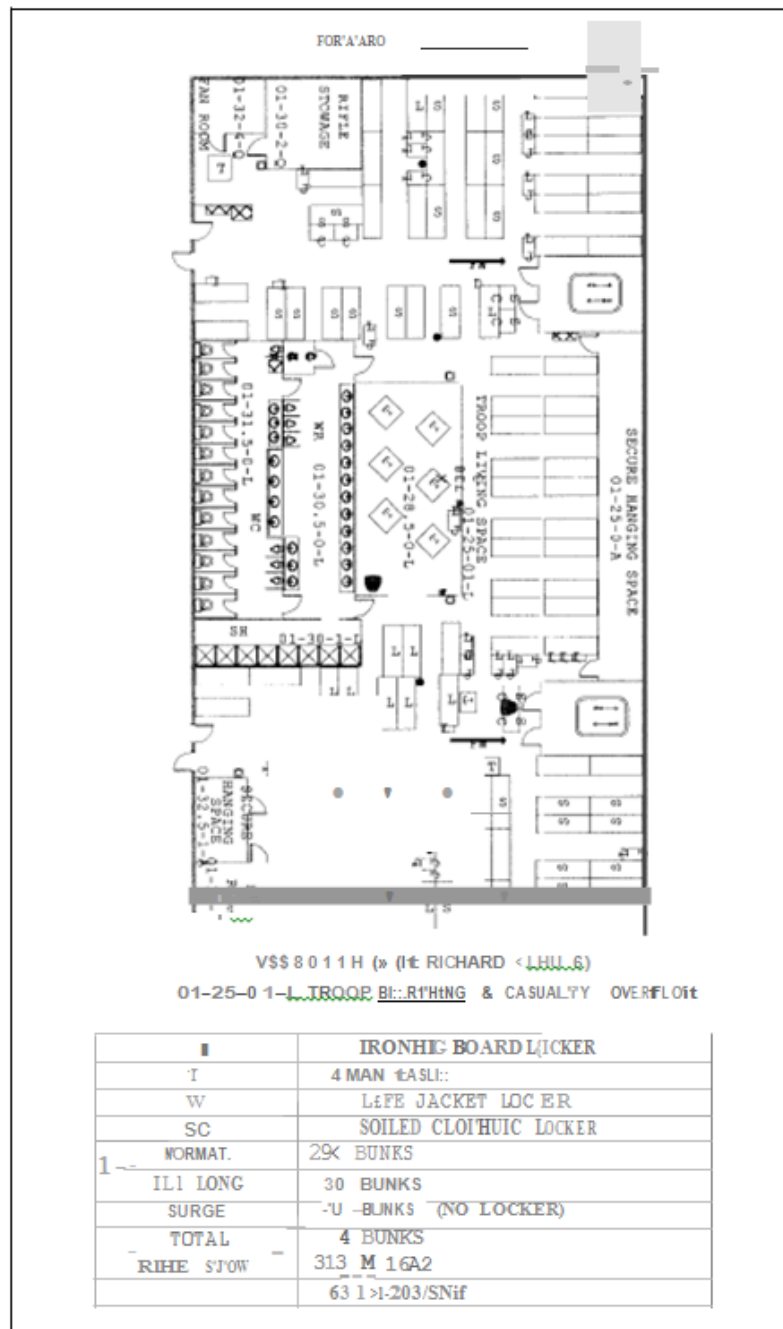
The embarkation planning and execution process generates a considerable quantity of prepared products. The following planning products are documents that are utilized frequently during the planning process:

- The **Organization for Embarkation and Assignment to Shipping worksheet**
- The **Ship's Loading Characteristics Pamphlet**
- The **Loading Plan**
- The **Embarkation Plan**

Embarkation Planning Considerations (Continued)

The Ship's Loading Characteristics Pamphlet (SLCP):

The below diagrams are drawn from the SLCP- they detail key information that is immediately relevant to Marines embarking onboard naval shipping. The SLCP details, among other things, shipboard compartment dimensional information, shipboard berthing capacities and additional technical vessel characteristics



Embarkation Planning Considerations (Continued)

Organization for Embarkation and Assignment to Shipping Worksheet (OE&S):

The OE&S worksheet is usually published at the LF or embarkation group level, but it may also be published at the embarkation unit/element levels. The OE&S worksheet includes LF's, naval and other forces that are embarking on ships, self-deploying aircraft, and air mobility command (AMC) aircraft. The OE&S worksheet is part of the embarkation plan and is normally prepared via 2 mediums-a worksheet (detailed below) and a message sent via official message traffic systems.

The example below provides an example of an OE&S worksheet (spreadsheet) used by the LF level when there is more than one embarkation group (e.g., AE, AFOE, self-deploying A/C, AMC airlift). An embarkation group and unit could also apply this format when there is more than one embarkation unit or element (e.g., AE and/or AFOE embarking from multiple seaports, AMC airlift embarking from multiple aerial ports).

ORGANIZATION FOR EMBARKATION AND ASSIGNMENT TO SHIPPING WORKSHEET (Data used in worksheet is illustrative only)										
EMBARKATION GROUP EMBARKATION GROUP COMMANDER GROUP EMBARKATION OFFICER		ALPHA LTCOL CAPT			BRAVO LTCOL CAPT			CHARLIE LTCOL CAPT		
TOTAL CAPACITY		SHIP CAPACITIES								
SHIP NUMBER		LHD-5	LPD-17	LSD-44	LHA-4	LPD-15	LSD-41	24 F/A-18C	6 EA-6B	18 AV-8B
OFFICER	669	191	46	34	172	71	34	24 F/A-18D	6 KC-130	
SSNCO (M/F)	269/27	646	42	21/3	576	21/0	21/3			
E1-E6 (M/F)	6,857/321	1,542/66	696	420/30	1,563/96	835/0	420/30			
VEHICLE SQFT	183,493	29,203	23,163	18,451	35,663	15,824	18,451	REFLECT FLIGHT FERRY IF APPLICABLE		
CARGO CUFT	621,361	149,293	185,304	6,665	202,174	48,889	6,691			
BULK DPM (GAL)	3,453,335	1,834,710	800,602	18,776	0	728,000	31,910			
BULK MOTOR	47,989	500	330	500	500	23,114	500			
GASOLINE (MOGAS) (GAL)	1,841,521	604,915	315,000	50,569	417,009	370,625	53,000			
BULK JP-5 (GAL)										
		LSD-50			LSD-51	LSD-46				
		32			32	35				
		21/3			21/3	22/3				
		420/30			420/30	411/39				
		16,003			16,003	19,067				
		80,816			66,331	6,651				
		30,226			31,828	31,910				
		500			500	500				
		53,230			53,230	53,000				
LIFT CAPABILITY TOTALS BY EMBARKATION GROUP		325			344					
		127/12			142/15					
		3,208/126			3,649/195					
		78,501			104,988					
		290,421			330,940					
		2,629,887			823,648					
		22,675			21,114					
		914,657			926,864					
UNIT LIFT REQUIREMENTS										
ORGANIZATION	LIFT REQUIREMENTS									
	OFFICER									
	SSNCO (Male/Female)									
	E1-E6 (Male/Female)									
	VEHICLE SQFT/STONS									
	BULK CARGO CUFT/STONS									
CMO ELEMENT, 2D MEB	76	63			13					
	21/1	16/1			5/0					
	289/15	21/5			74/10					
	2,776/22.7	2,118/17.3			618/5.4					
	1231.6.2	950.4.8			281.3.4					
EXCERPTS										
UNFA-115	50							50		
	12/2							12/2		
	224/8							224/8		
	9,118/72.3							9,118/72.3		
	11,200/83.7							11,200/83.7		
EXCERPTS										
TOTAL UNIT LIFT REQUIREMENTS	775	303			422			50		
	265/27	117/12			136/13			12/2		
	6,814/297	2,761/120			3,829/169			224/8		
	192,711/5,960.4	95,899/5,075.6			87,694/2,812.1			9,118/72.3		
	402,206/2,128.4	207,810/1,086.7			183,196/958.0			11,200/83.7		
SUPPLY CLASS TYPE	GALLONS	CUFT/STONS								
CLASS I										
RATIONS		6,768/106.6			3,511/55.4			3,257/51.4		
CLASS III										
LUBE OIL 30WT		2,256/36.4			1,281/20.7			975/15.7		
LUBE OIL 90WT		336/0.4			168/0.2			168/0.2		
BULK MOGAS	47,500				23,500			24,000		
CLASS IV										
MULTIPACK		8,648/37.6			5,000/21.7			3,648/15.9		
IFORM PRG		5,620/46.0			2,810/23.0			2,810/23.0		
CLASS VII										
ANAL		19,488/139.2			11,253/60.4			8,235/58.8		
TOTAL SUPPLIES	47,500	43,116/366.4			24,023/201.4			19,093/163.0		
GRAND TOTALS	47,500	775			303			422		
		265/27			117/12			136/13		
		6,814/297			2,761/120			3,829/169		
		192,711/5,960.4			95,899/5,075.6			87,694/2,812.1		
		445,322/2,494.8			231,833/1,288.1			202,289/1,123.0		

Embarkation Planning Considerations (Continued)

Organization for Embarkation and Assignment to Shipping Worksheet (OEA&S)

Continued): The second example of an OEA&S worksheet below provides an example of an OE&AS worksheet (spreadsheet) used by the LF and/or embarkation group, unit, or element when there is only one embarkation group, unit, or element. It provides allocation directly to the embarkation team level. Except for the different embarkation organization (group, unit, element, or team) listed at the top of the worksheet, the format for the OE&AS is basically the same. The OE&AS worksheet totals at the bottom show the number of personnel, supplies, and equipment planned for lift in the embarkation organization (group, unit, element, or team). This total cannot exceed the amphibious transport group, unit, element, or ship capacity.

ORGANIZATION FOR EMBARKATION AND ASSIGNMENT TO SHIPPING WORKSHEET: EMBARKATION UNIT: ALPHA (Data used in worksheet is illustrative only)					
EMBARKATION TEAM COMMANDING OFFICER OF TROOPS TEAM EMBARKATION OFFICER		ALPHA 1 LT COL CAPT	ALPHA 2 MAJ ISTLT	ALPHA 3 MAJ ISTLT	
SHIP CAPACITIES					
SHIP NAME HULL NO.		USS NASSAU LHA-4	USS Mesa Verde LPD-19	USS TORTUGA LSD-46	
BERTHING CAPACITY:	EMBARK UNIT ALPHA CAPACITY				
OFFICER	286	172	66	35	
SSNCO (Male/Female)	105/9	57/6	42	22/3	
E1-E6 (Male/Female)	2,682/135	1,563/96	696	411/39	
VEHICLES (SQFT)	71,110	35,663	23,163	19,067	
BULK CARGO (CUFT)	256,270	202,174	185,304	6,651	
BULK POL (GALS) DFM/MOGAS/PS	860,275/24,000/82,009	0/100/417,009	800,602/330/315,00	31,910/500/33,000	
UNIT LIFT REQUIREMENTS					
ORGANIZATION	LIFT REQUIREMENTS OFFICER SSNCO (Male/Female) E1-E6 (Male/Female) VEHICLE SQFT/STons BULK CARGO CUFT/STons				
COMMAND ELEMENT 26 MEU	31 15/0 214/0 3,642/89.8 4,929/75.0	31 15/0 208/0 3,269/79.0 4,365/72.0	0 0/0 6/0 373/10.8 564/3.0		
HD&M-365	65 19/0 355/0 0/0.0 2,614/94.6	65 19/0 355/0 0/0.0 2,614/94.6			
BLT 3rd BATTALION 6th MARINES	58 26/0 1,063/0 21,668/1139.6 6,611/76.8	35 16/0 535/0 7,372/242.0 3,392/48.5	8 3/0 191/0 1,560/57.8 1,410/8.8	15 7/0 337/0 12,736/940 3,078/32.5	
CLB-26	18 17/0 253/0 14,336/751.2 4,303/105.1	6 5/0 81/0 1,992/132.9 1,036/13.3	12 11/0 137/0 8,275/374.3 1,200/12.8	0 1/0 35/0 4,069/244 2,067/79.0	
NAVAL SUPPORT ELEMENT	12 14/0 87/0 2,931/119.2 2,100/27.2	10 9/0 45/0 678/29.0 1,000/16.2	1 1/0 21/0 2,138/87.2 0/0	1 4/0 21/0 115/3.0 1,100/11.0	
DET, HSC-6 (SAR)	8 1/0 21/0 0/0.0 0/0.0	8 1/0 21/0 0/0.0 0/0.0			
TOTAL LIFT REQUIREMENTS	192 92/0 1,993/0 42,577/2099.8 20,557/368.7	155 65/0 1,245/0 13,311/482.9 12,407/229.6	21 15/0 355/0 12,346/529.9 1,905/16.6	16 12/0 393/0 16,920/1,087.0 6,245/125.5	
LANDING FORCE SUPPLIES					
SUPPLY CLASS TYPE	GALLONS	CUFT/STons			
CLASS I RATIONS		13,160/118.0	8,084/94.0	5,076/24.0	
CLASS III PACKAGED LFORM BULK MOGAS LFORM	24,000	3,902/48.0	2,120/40.0	1,782/8.0	
CLASS IV MULTIPACK LFORM PKG		850/3.2 2,808/23.0	850/3.2 1,836/18.0	972/5.0	
CLASS V Ground Air		35,826/452.0 48,922/409.0	23,000/407.0 40,000/395.0	12,826/451.0 3,922/14.0	
CLASS VIII AMAL		1,750/9.4		1,250/6.3	500/3.1
TOTAL SUPPLIES	24000	102,218/1,062.6	75,890/957.2	25,828/102.3	500/3.1
GRAND TOTALS	24000	192 92/0 1,993/0 42,577/2,099.8 122,775/1,431.3	155 65/0 1,245/0 13,311/482.9 8,8297/1,186.8	21 15/0 355/0 12,346/529.9 27,733/118.9	16 12/0 393/0 16,920/1,087.0 6,745/125.6

Embarkation Planning Considerations (Continued)

The Loading Plan

All of the individually prepared documents which, taken together, present in detail all instructions for arrangement of personnel and the loading of equipment for one or more units.

The loading plan consists of the following documents:

- The cover page
- Consolidated Embarkation and Tonnage Table
- Consolidated Unit Personnel and Tonnage Table
- Consolidated Cargo and Loading Analysis Table
- Consolidated Vehicle and Summary Priority Table and Vehicle Table
- Stowage Diagrams and stowage diagram manifests
- Profile Loading Diagrams (cargo ships only)

The below diagram is a template for a Stowage Diagram - a key product that helps Marine planners determine how to position cargo and equipment onboard ship.

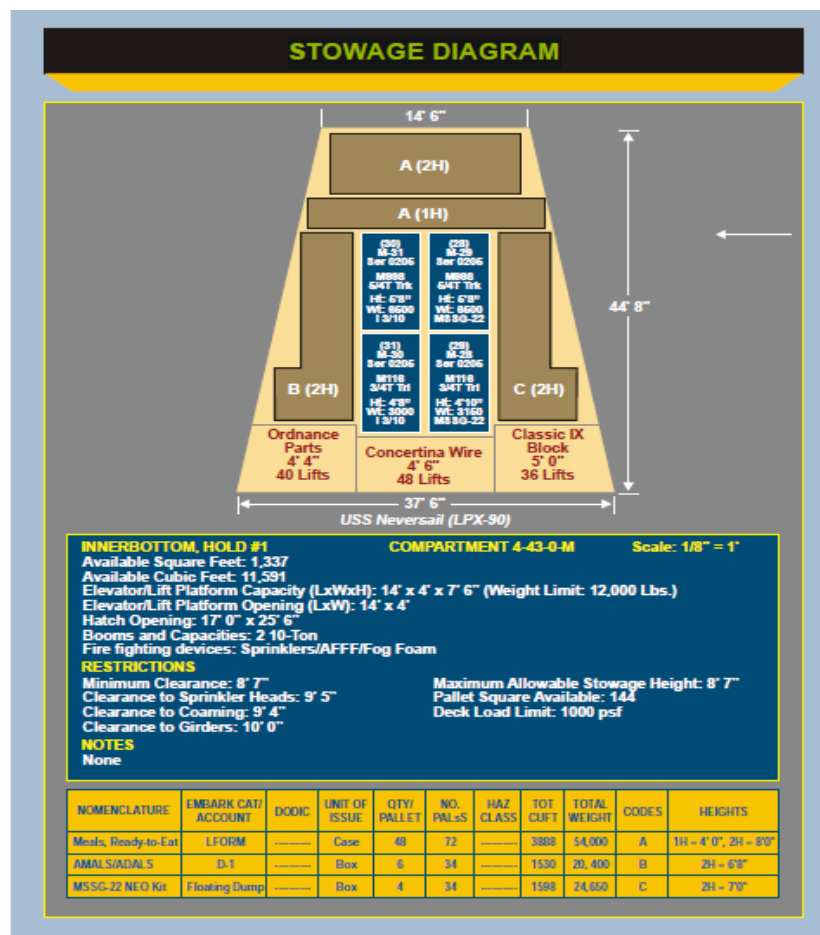


Figure H-7. Stowage Diagram

Embarkation Planning Considerations (Continued)

The Embarkation Plan

The Embarkation Plan is the plan prepared by the landing force and appropriate subordinate commanders that contains instructions and information concerning the organization for embarkation, assignment to shipping, supplies and equipment to be embarked, location and assignment of embarkation area, control and communications arrangements, movement schedules and embarkation sequence, and additional pertinent instructions related to the embarkation of the landing force. The documents below are excerpts from a template for the Embarkation Plan.

<p style="text-align: center;">CLASSIFICATION</p> <p style="text-align: right;">Copy no. ____ of ____ copies Issuing headquarters Place of issue Date/time of issue</p> <p>EMBARKATION PLAN</p> <p>Ref: (a) (b) (c)</p> <p>Time Zone:</p> <p>1. () <u>ORGANIZATION FOR EMBARKATION</u></p> <p>a. () <u>General</u>. (The major organization of each embarkation echelon directly subordinate to the issuing HQ is listed. Reference is made to the appropriate annex for the detailed list of units comprising each echelon. A statement concerning the plan for AFOE and/or follow-up shipping may be made here if required.)</p> <p>b. () <u>Assignment to Shipping</u>. (Reference is made to Tab A or the DTG of the OE&AS message. Normally, this is the only entry appearing in this paragraph.)</p> <p>2. () <u>MATERIEL TO BE EMBARKED</u></p> <p>a. () <u>Organic Equipment</u>. (The quantity of organic equipment to be embarked by the command. Reference may be made to Tab B.)</p> <p>b. () <u>Types and Amount of Supplies</u>. (The quantity of supplies to be embarked, by classes, to include water and medical supplies. Reference may be made to Tab B.)</p> <p>c. () <u>Preparation</u>. (Instructions relative to packing, crating, palletizing, marking, and waterproofing. Reference may be made to Tab B, logistics SOP, embarkation SOP, or other appropriate order.)</p> <p>d. () <u>Allocation of Supplies and Equipment</u>. (Allocation of supplies and equipment, to be embarked by the command as a whole, to the various subordinate embarkation echelons. When this information is detailed, it is usually set forth in tabular form and appended as an annex.)</p> <p style="text-align: center;">CLASSIFICATION</p>	<p style="text-align: center;">CLASSIFICATION</p> <p>e. () <u>Movement</u>. (Instructions concerning coordination and responsibility for movement of materiel, to include schedules and transportation to be used.)</p> <p>3. () <u>PERSONNEL</u></p> <p>a. () <u>Uniform, Equipment, and Baggage</u>. (Uniform to be worn by embarking personnel, individual equipment to be carried, and baggage allowance for each person.)</p> <p>b. () <u>Advance Details</u>. (Instructions concerning working details and FP and security personnel required in the embarkation areas are set forth, in addition to information concerning the advance party for each assigned ship. Instructions should include information pertaining to provision, composition, functions, movement, billeting, messing, and administration of these advance details.)</p> <p>c. () <u>Movement of the Main Body</u>. (Dates and times of movement and transportation to be used.)</p> <p>d. () <u>Embarkation Rosters</u>. (This subparagraph is prepared by G-1/S-1. It includes instructions relative to format, content, and distribution of embarkation rosters.)</p> <p>4. () <u>EMBARKATION AREAS</u></p> <p>a. () <u>Assignment of Areas and Embarkation Points</u>. (Instructions are usually set forth in tables, maps, or sketches and are appended as annexes. Instructions regarding liaison to be established with port authorities may also be included. Reference may be made to Tab C.)</p> <p>b. () <u>Preparation</u>. (Responsibility for improvement of assigned areas and for preparation of specific loading points is prescribed. Typical items covered are the construction or widening of roads, clearing of open storage areas, and the improvement of piers, ramps, and beaching slots.)</p> <p>c. () <u>Materials Handling Equipment</u>. (Instructions relative to the provision, allocation, operation, and maintenance of roller conveyers, forklift trucks, tractors, cranes, pallets, and other MHE are set forth.)</p> <p style="text-align: center;">CLASSIFICATION</p>
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Key Embarkation Personnel

Team Embarkation Officer. The TEO is a commissioned officer assigned from the embarking organization forming the nucleus of the embarkation team. Qualified assistants should be assigned to the TEO early in the planning phase. General duties of the TEO are as follows:

- Act as the direct representative of the embarkation team commander in matters pertaining to team embarkation and cargo loading.
- Maintain liaison between the embarkation team commander and the ship's Commanding Officer.
- Prepare detailed loading plans for the ship to which the embarkation team is assigned.
- Coordinate and supervise execution of the loading plan.

Embarkation Planning Considerations (Continued)

-Possess knowledge in use of automated logistics systems, unit movement, and load planning systems.

-Be familiar with the LF landing plan.

-Be familiar with designated landing areas.

Combat Cargo Officer. The CCO is typically a limited duty officer/warrant officer qualified in the field of embarkation. The CCO is also a member of the ship's company and is a department head that reports to the ship's CO via the ship's Executive Officer. All amphibious ship's besides the LSD-41 class have a USMC CCO assigned. The CCO will have a group of Combat Cargo Assistants (CCAs) assigned as well. General duties of the CCO are as follows:

-Act as the direct representative of the ship's CO.

-Maintain liaison with the TEO.

-Assist the TEO in preparing detailed loading plans for the ship.

-Coordinate and supervise the execution of the loading plan.

-Assist in offload planning.

-Manage, load and track the Landing Force Operational Reserve Material account.

Amphibious Operations C2 and Responsibilities

Marine Corps and Naval personnel, by necessity, operate in close proximity while embarked and underway on Naval shipping. The complex nature of all shipboard operations and the level of detailed planning needed to successfully execute an amphibious exercise or operation requires that all Marines involved with amphibious planning have a firm understanding of the planning obligations on both the Marine Corps, or "green" side, and the "blue" side Navy. JP 3-02 details the following breakdown of responsibility for ship to shore movement (JP 3-02 p. 22) JP 3-02 (p. 11) states that the relationship between the CATF and the CLF in an amphibious task force should be based on the following:

- *Mission*
- *Nature and duration of the operation*
- *Force capabilities*
- *Operational environment*
- *Recommendations from subordinate commanders*

Embarkation Planning Considerations (Continued)

JP 3-02 also tells us that, regardless of the command relationships as established by higher authority, “...when the initiating directive is received, unique relationships are observed during the planning phase. The AF commanders are **coequal in planning matters**. Planning decisions should be reached on a basis of common understanding of the mission, objectives, and tactics, techniques and procedures on a free exchange of information. Any differences between commanders that cannot be resolved are referred to the establishing authority. If a change in the mission occurs after commencement of operations or if an amphibious operation is initiated from an afloat posture, coequal planning relationships (either as described above or as specified in the initiating directive) will apply to any subsequent planning.”

Moreover, an **establishing directive** is a key factor in clarifying the purposes of the various relationships that will exist between the CATF and CLF and the scope of the action to be taken during an amphibious operation. The establishing directive may include details concerning the following:

Forces and other resources allocated to the supporting effort. Time, place, level, and duration of the supporting effort. Relative priority of the supporting effort. Authority, if any, of the supporting commander(s) to modify the supporting effort in the event of an exceptional opportunity or an emergency.

Degree of authority granted to the supported commander over the supporting effort. Force protection responsibilities afloat and ashore.

You have worked with various types of supporting relationships over the course of your field time and class time here at TBS. The below table details the flow of support – **defined by JP 3-02 as a command authority and relationship that is appropriate when one organization aids, protects, complements or sustains another force** – during an amphibious operation.

Examples of Shifts in the Support Relationship (JP 3-02 p. 13)	
Mission type	Supported Commander
Assault	CATF, then CLF
Raid with coastal threat	CATF, then CLF, then CATF
Inland raid with no coastal threat	CLF
Demonstration	CATF
Withdrawal	CLF, then CATF

CATF Responsibilities.

1. Debarkation and ship to shore movement until termination of the amphibious operation. During the execution of the amphibious operation the CATF is overall responsible for ship to shore movement and will coordinate with the CLF to adjust in event situation changes.

Embarkation Planning Considerations (Continued)

2. Responsible for debarkation and ship to shore movement until termination of the amphibious operation.

CLF Responsibilities.

Determining landing force requirements for ship to shore movement and presenting them to the CATF. The CLF provides information on the ability of organic, “green-side” assets (aircraft and amphibious platforms) to the CATF and prepares the documents contained in the LF landing plan.

LF C2 Afloat and Ashore.

When afloat, the CLF and his staff plan direct and monitor the landing force actions from ship. When C2 is phased ashore, the LF can assume control from the COC ashore. (JP 3-02 p. 33) The LF commander and his staff will have their own planning spaces allocated aboard Naval shipping (such as the Landing Force Operations Center, or LFOC) and will exercise C2 from these spaces. The CLF will transition LF C2 assets ashore per the landing plan.

Summary

You have learned about current Marine Corps and joint doctrine governing amphibious operation planning and command and control. We have reviewed the different types of planning associated with the amphibious planning process and several historical case studies of crisis action and deliberate planning. You are now familiar with the fundamentals of higher-level Marine Corps planning processes. You will encounter these planning processes regardless of where you serve in the Fleet – be especially aware of the requirements associated with unit training that these plans require as your unit may be called to perform any number of amphibious missions in the future, ranging from an amphibious exercise or rehearsal to a TRAP mission to an assault.

References

Reference Number or Author	Reference Title
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JP 3-02	Amphibious Operations
JP 3-02.1	Amphibious Embarkation and Debarkation
MCRP 3-31B	Amphibious Ships and Landing Craft Data Book
JP 1-02	DoD Dictionary of Military and Associated Terms
MCDP 3	Expeditionary Operations
MCWP 3-31.6	Supporting Arms Coordination in Amphibious Operations
MCRP 3-31A	Employment of Landing Craft Air Cushion (LCAC)
MCDP 1-0	Marine Corps Operations

References (Continued)

MCRP 5-12D	Organization of the Marine Corps Forces
MCO 3120.8	Policy for the Organization of Fleet Marine Forces for Combat
MCDP 1	Warfighting
NTTP 3-01.1M	Navy Tactics, Techniques, and Procedures 3-01.1M

Acronyms

AAV	Amphibious Assault Vehicle
AF	Amphibious Force
AFOE	Assault Follow On Echelon
C2	Command and Control
CAP	Crisis Action Planning
CATF	Commander, Amphibious Task Force
CCO	Central Control Officer
CLF	Commander, Landing Force
COA	Course of Action
CP	Control Point
HSS	Health Service Support
HTA	Helicopter Transport Area
HWSAT	Heli-team Wave and Serial Assignment Table
LARC	Lighter, Amphibious Resupply, Cargo
LF	Landing Force
LZ	Landing Zone
MCPP	Marine Corps Planning Process
MEB	Marine Expeditionary Brigade
MEDREG	Medical regulating
MEF	Marine Expeditionary Force
NBG	Naval Beach Group
R2P2	Rapid Response Planning Process
RP	Rendezvous Point
SLCP	Ship's Loading Characteristics Pamphlet
TRAP	Tactical Recovery of Aircraft Personnel

Notes

[illegible]