UNITED STATES MARINE CORPS
Logistics Operations School
Marine Corps Combat Service Support Schools
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STUDENT HANDOUT

LANDING PLAN

LEARNING OBJECTIVES:

a. Terminal Learning Objective: Given the applicable reference material, OPLAN, and embarkation plan, execute a unit move, per Joint Pub 3-02.2 and NWP 22-3. (0431.04.02)

b. Enabling Learning Objectives: Given the applicable reference material and a landing plan, per NWP 22-3 and Joint Pub 3-02, identify: (0431.04.02j)

(1) The purpose and scope of the landing plan.

(2) The definition and characteristics of a ship-to-shore movement.

(3) When ship-to-shore movement commences and concludes.

(4) The two periods of ship-to-shore movement.

(5) The five movement categories of ship-to-shore movement.

(6) The definition of a landing serial number.

(7) The ship-to-shore movement plan/landing plan documents prepared by the Commander Amphibious Task Force (CATF) and Commander Landing Force (CLF).

REQUIRED RESOURCES: Student Outline C107-1 (7-99)

OUTLINE:

1. **THE LANDING PLAN**

a. Purpose. The Landing Force (LF) landing plan designates the forces that will be going ashore and promulgates the means, organization, sequence, and landing priorities. It is the integrated sum of detailed plans prepared by the LF. Figures 3-3 & 3-4 in FMFM 1-8/NWP 22-3, show the preparation sequence and relationship between each document. Figure 3-16 contains the format for the LF landing plan.

b. Location. The landing plan is found in Appendix 3 (Ship-to-Shore Movement), to Annex R (Amphibious Operations) of the LFs operation order.

(1) The body of the landing plan is usually short providing information of interest to all units.

(2) The bulk of the landing plan is a compilation of documents which are included as tabs and enclosures and which contain facts and figures essential for the orderly and timely execution of the assault.

2. **SHIP-TO-SHORE MOVEMENT**. Ship-to-shore (STS) movement is that portion of the assault phase of an amphibious operation which includes the deployment of the landing force from the assault shipping to designated landing areas (JP 1-02).

a. Its objective is to land troops, equipment, and supplies at the prescribed times and place and in the order for landing which is necessary to support the LF scheme of maneuver ashore.

b. The STS movement is waterborne, helicopterborne, or a combination of both. It is initiated from beyond the enemy's visual and ground based radar range (over-the-horizon or OTH), near shore or combination of both.

3. **SHIP-TO-SHORE MOVEMENT COMMENCEMENT AND CONCLUSION**

a. Ship-to-shore movement commences on order from the CATF to "Land the Landing Force." (FMFM 1-8/NWP 22-3, page 1-3, par 1.3 & 4-1, par 4.2.1)

(1) STS movement is divided into two periods. They are:

(a) Initial Unloading Period. This period is tactical and provides for the rapid buildup of combat power ashore and quick response to the LF tactical and logistical requirements ashore.

(b) General Unloading Period. This period is primarily logistical and emphasizes rapid unloading of personnel and material remaining in the Assault Echelon (AE) and Assault Follow On Echelon (AFOE) shipping required to support LF operations ashore. (FMFM 1-8/NWP 22-3, page 1-3, par 1.3)

b. Ship-to-shore movement concludes when unloading of all assault shipping is completed. (FMFM 1-8/NWP 22-3, page 1-3, par 1.3 and page 4-2, par 4.3)

4. **SHIP-TO-SHORE PLANNING CONSIDERATIONS**. The LF scheme of maneuver ashore determines the major aspects of the STS movement. Specific STS movement planning considerations are:

a. OTH or near shore launch

b. Helicopterborne, waterborne, or a combination of both

c. Location of landing beaches, landing craft air cushion landing zones (CLZs), and helicopter landing zones (HLZs)

d. Assault shipping dispersal

e. Composition and timing of assault waves

f. Tactical integrity of the LF.

(1) Selection of these considerations is affected by:

(a) Hydrographic features of beach approaches

(b) Beach size and trafficability to support the landing

(c) Characteristics of CLZs and HLZs and their approaches

g. Embarkation Flexibility:

(1) The organization for embarkation must be compatible with the LF landing plan. To achieve a landing in proper formation to initiate combat, the LF is organized for the tactical integrity of helicopterborne and waterborne units participating in the STS movement.

(2) The tactical integrity of a given unit does not always require an entire unit to embark in a single ship. The main focus of the loading plan and organization for embarkation is to facilitate a smooth flow of units and supplies ashore during the STS movement.

(3) Cross decking units from one ship to another prior to commencement of the STS movement, referred to as pre-H-hour transfers, can enhance efficiency of the STS movement, particularly when the LF was embarked prior to the completion of detailed planning. Pre-H-hour transfers should be minimized, because it may have an adverse impact on helicopters and landing craft available for the STS movement.

(4) Military Sealift Command (MSC)-chartered assault shipping is another critical consideration in the organization for embarkation.

(5) The organization for embarkation also provides for maximum flexibility to support alternate plans that may be adopted. Changes in conditions of friendly or enemy forces during the movement phase may cause major changes in the LF landing plan with no opportunity for reloading the LF. PERMA changes to embarkation, movement, planning, rehearsal, and assault (EMPRA). JP 3-02.2 discusses amphibious embarkation in detail.

h. Oceanographic Considerations. Oceanographic considerations influence the types of STS movement adopted. Principal oceanographic considerations are:

(1) Hydrographic features of offshore areas, particularly out to the 3 ½ fathom curve

(2) Extent of minable waters

(3) Capacity of beaches for landing troops, equipment, and supplies

(4) Suitability of beaches for beaching landing ships, landing craft, and employing causeways and amphibious assault vehicles (AAVs) under expected weather and tidal conditions.

5. **TROOP AND EQUIPMENT MOVEMENT CATEGORIES**. For planning the STS movement, LF troops and supplies are arranged in five movement categories:

1 - Scheduled waves

2 - On-call waves

3 - Nonscheduled units

4 - Propositioned emergency supplies

5 - Remaining LF supplies

a. Scheduled Waves. Scheduled waves have their time, place, and formation for landing predetermined.

(1) Consist of helicopters, landing craft, or AAVs carrying serialized assault troops and their initial CSS ashore.

(2) After waterborne waves cross the line of departure (LOD), landing craft air cushion (LCAC) cross cushion departure point (CDP), and helicopterborne waves leave there departure point; landing of scheduled waves normally proceeds without change. This is necessary in order to maintain the momentum of the assault and provide for the rapid build up of combat power ashore.

(3) Waterborne waves land in accordance with the assault schedule (par 3.4.2.8). Helicopterborne waves proceed in accordance with the helicopter employment and assault landing table (HEALT) (par 3.4.2.13).

b. On-call Waves. On-call waves are those elements of the LF whose need ashore early in the landing is expected, but the time and place of landing cannot be accurately predetermined.

(1) They are subject to immediate or emergency call and are positioned to be readily available after H-hour.

(2) On-call waves consist of serialized combat units, combat support units, and CSS and are request by tactical commanders ashore through the tactical logistics (TACLOG) group.

(a) Waterborne on-call waves remain aboard ship for delivery by static or underway launch or positioned at the LOD in landing craft.

(b) Helicopterborne on-call waves are positioned aboard ship.

(3) If adequate numbers of landing craft are not available, on-call serials may wait aboard ship for a subsequent trip by landing craft.

(4) To preserve the high-priority status of on-call waves, their number is kept to a minimum.

(5) Waterborne on-call waves are listed in the assault schedule. Helicopter on-call waves are listed in the HEALT.

c. Nonscheduled Units. Nonscheduled units are the remaining serialized units of the LF assault echelon (AE), with their CSS, whose landing is expected before general unloading begins.

(1) The need for nonscheduled units ashore is usually not an immediate or emergency requirement.

(2) They are landed when requested by tactical commanders through the TACLOG group and they may be landed before on-call waves are completed, if required..

(3) Each LF commander prepares a landing sequence table for nonscheduled units. These tables prioritize nonscheduled units' order of landing.

(4) If it is planned to land CSS, Navy, or aviation elements across a beach before the nonscheduled units landing is completed, CLF will inform the GCE

commander of these units with their priority so they can be listed in the GCE commander's landing sequence table.

(5) CLF prepares a LF landing sequence table which consolidates all nonscheduled units, including combat support, CSS, and aviation units.

d. Propositioned Emergency Supplies. Propositioned emergency supplies are designated by CLF to meet expected critical needs for CSS replenishment early in the STS movement. These serialized supplies, available for immediate delivery ashore, are organized into floating dumps and prestaged helicopter-lifted supplies.

(1) Floating Dumps. Because of limited amount of CSS landed with assault units, it is necessary to begin replenishing supplies ashore early in the assault. Tactical CSS requirements are met by establishing floating dumps in the proximity of the LOD.

(a) Floating Dumps consist of preplanned, balanced loads of supplies, such as ammunition, water, lubricants, etc. that are boated in landing craft.

(b) Floating Dumps are landed when requested by a tactical commander through the TACLOG group, and are listed in the landing craft employment plan (par 3.4.1.3) and landing craft and amphibious vehicle assignment table (LCAVAT) (par 3.4.2.3).

(2) Prestaged Helicopter-Lifted Supplies. Similar in purpose to floating dumps, prestaged helicopter-lifted supplies are positioned aboard helicopter capable ships.

(a) These serialized supplies can be delivered to either helicopterborne or surfaceborne units.

(b) They are requested by a tactical commander ashore through the TACLOG group and are listed in the heliteam wave and serial assignment table (HWSAT) (par 3.4.2.11).

e. Remaining LF Supplies. Remaining LF supplies are serialized and consist of replenishment supplies and equipment not included in a unit commander's prescribed

loads, floating dumps, or prestaged helicopter-lifted supplies.

(1) These supplies are listed in embarkation documents and constitute the major portion of CSS transported into the landing area with the AE and AFOE.

(2) Certain supplies are selectively offloaded to maintain dump levels ashore, however, the bulk of remaining LF supplies are landed during general unloading.

6. **PREPARATION OF DOCUMENTS**. A number of documents are prepared by the Navy and the LF commanders to plan the STS movement. Figure 3-1 illustrates the documents prepared by the Navy and the LF.

a. Documents Prepared by the Navy

(1) Naval Landing Plan

(2) Landing Craft Availability Table

(3) Landing Craft Employment Plan

(4) Debarkation Schedule (prepared jointly by ship’s CO and CO of troops)

(5) Ship’s Diagram

(6) Pontoon Causeway Plan

(7) Unloading Plan

(8) Approach Schedule

(9) Assault Wave Diagram

(10) Landing Area Diagram

(11) Transport Area Diagram

(12) Beach Approach Diagram

(13) Sea Echelon Area

(14) Landing Control Plan

(15) Medical Regulating Plan

b. Documents Prepared by the Landing Force

(1) Landing Force Landing Plan. The LF landing plan designates the forces that will be going ashore and promulgates the means, organization, sequence, and landing priorities. It is the integrated sum of detailed plans prepared by the LF. In addition the LF landing plan will:

(a) Allocate blocks of serial numbers to subordinate commands.

(b) Correlate the landing sequence for units not landed with the Ground Combat Element (GCE), but landed prior to general unloading.

(c) Coordinate GCE landing plans (e.g. Divisions, RLTs, and BLTs, etc.)

(2) Amphibious Vehicle Availability Table. This document is prepared by the GCE and lists the number and type of amphibious vehicles available for landings, the LF units embarked in them, the ships carrying them, and any remarks (Figure 3-17).

(3) Landing Craft and Amphibious Vehicle Assignment Table. This document is prepared by the GCE and promulgated concurrently with the Landing Diagram. The LCAVAT organizes the LF AE into boat teams; assigns boat teams to scheduled waves, on-call waves, or nonscheduled units; list the LF units assigned to boat teams; show the precise position of the boat teams in the assault waves; and includes instructions for floating dumps. This table and the debarkation schedule provide the ship's CO with the information needed for debarking troops and floating dump supplies (Figure 3-18).

(a) Boat Space Allowances. A boat space allowance is a variable that accounts for the space and weight factor of personnel/equipment being assigned to a landing craft or amphibious vehicle. It is used so that the maximum loading capacity of the craft will not be exceeded.

(b) Tactical Integrity. Boat teams are assigned positions in assault waves to maintain tactical

integrity. For example, a rifle squad and its equipment is assigned in the assault wave formation in proper relation to other squads of the platoon to facilitate unit employment on landing. Nonscheduled units are also boated tactically.

(c) Guidelines for Assignment to Boat Teams. The assignment of headquarters units and attached supporting troops, such as forward observers, naval gunfire spotter, and communications personnel, is made to the landing craft or amphibious vehicle carrying the unit to which they are attached or will directly support. The risk of debilitating losses in command echelons is reduced by distributing these personnel among several landing craft/amphibious vehicles, e.g. an Alpha command group with the CO and skeleton staff and a Bravo command group with the XO and skeleton staff. Both commands are capable of conducting BLT operations.

(4) Landing Diagram. The landing diagram is prepared by the GCE and promulgated concurrently with the LCAVAT. The landing diagram graphically shows the tactical deployment of boat teams in scheduled waves. It provides the wave composition, showing AAVs/landing craft and boat teams, and touchdown times for a colored or numbered beach and CLZ (Figure 3-19).

(5) Serial Assignment Table. The LF serial assignment table (SAT) lists in numerical order the serial numbers of all units that are landed prior to general unloading. The table is a ready reference for the composition of each unit assigned a serial number (Figure 3-20).

(a) Serial Numbers. A serial is a grouping of LF personnel and equipment which originates from the same ship and, for tactical or logistical reasons, will land on a specified beach, CLZ, or HLZ at the same time. An abstract number is assigned to each serial for reference. All LF and STS organizations maintain a serial log to include:

1 Serial number

2 Time requested

3 Time dispatched

4 Time of arrival at the beach or LZ

(b) Allocation and Assignment of Serial Numbers. Early in the planning phase CLF allocates a block of consecutive serial number, based on administrative organization, to each LF and naval unit to be landed.

1 Allocation begins at the highest level

2 Each unit then allocates a consecutive portion of its block to subordinate units, and allocation continues until each element within the LF has a block of consecutive numbers (Figure 3-21).

3 The allocation of block serial numbers to units is based on the administrative organization and the assignment of individual serial numbers is based on the tactical organization for landing. Thus serial numbers are issued early in the planning process. Consolidated by CLF.

(6) Landing Priority Table. The landing priority table is a worksheet used by CLF to show the planned buildup of forces ashore. Based on the LF concept of operations ashore and provides the basis for the phased deployment of LF units ashore. It list major units to be landed in priority order, the landing day, and the designated beaches/LZs, if known (Figure 3-22).

(7) LF Landing Sequence Table. The LF landing sequence table is a complete listing of the estimated landing sequence of nonscheduled units (including combat support, CSS, and aviation units). It is the principal document used by control agencies in directing the STS movement of these units. CLF prepare the LF landing sequence table (Figure 3-23).

This table is the basis for developing embarkation and loading plans for nonscheduled units.

(8) Assault Schedule. The assault schedule provide the formation, composition, and timing of scheduled and on-call waves. The GCE commander considers subordinate commanders recommendations regarding number of waves on to designated beaches and numbers and types of amphibious

vehicles and landing craft in each wave when preparing this schedule (Figure 3-24).

(9) Amphibious Vehicle Employment Plan. The amphibious vehicle employment plan show the planned employment of AAVs and lighter, amphibious resupply, cargo-5 ton (LARC Vs) in the assault, including their employment after arrival the beach (Figure 3-35).

(10) Helicopter Availability Table. The helicopter availability table shows the number of helicopters available for the helicopterborne STS movement. Prepared by the ACE and is for D-day operations only (Figure 3-26).

(11) Heliteam Wave and Serial Assignment table (HWSAT). It identifies each heliteam (analogous to a boat team) by serial number with the wave number and helicopter position in the wave (Figure 3-28).

(12) Helicopter Landing Diagram. The helicopter-landing diagram graphically displays routes to and from HLZs (Figure 2-28).

(13) Helicopter Employment and Assault Landing Table (HEALT). The HEALT is a detailed plan for the movement of helicopterborne troops, equipment, and supplies. It is the landing timetable for helicopterborne STS movement and specifies the assignment of serials to helicopters for scheduled and on-call waves.

This document is the basis for preparing flight schedules and is used by the primary HDC to control helicopter movements. Prepared by the ACE in coordination with the HCS and primary HDC and is submitted to CATF for approval and coordination with supporting fire planning (figure 3-29).

REFERENCES: FMFM 1-8/NWP 22-3 (Rev. B)